BroadSoft Partner Configuration Guide

Yealink SIP-TxP Series

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BroadWorks® Guide

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Version	Reason for Change
1.1	Introduced document for Yealink SIP-T28 version 2.0.0.9.
1.2	Edited and published document.
1.3	Updated document for additional models.
1.4	Edited and published document.
1.5	Updated document for Yealink SIP-T28 version 2.51.0.1 test with BroadWorks Release 17.0. Updated the document for Device Management.
1.6	Edited and published document.
1.7	Updates to Device Management configuration requirements.
1.8	Edited and published document.
1.9	Added T2xP configuration instructions.
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2.1	Modified to incorporate the T18P model and to update the Device Management section.
2.2	Edited and published document.
2.3	Modified manual instructions for device management file parameters.
2.4	Updated document for Yealink SIP-T2xP version X.60.0.110 test with BroadWorks Release 17.0. Modified to incorporate the T38G and T32G model and to update the Device Management configuration instructions.
2.5	Edited changes and published document.
2.6	Updated document to incorporate T21P, as a supported device model.
2.7	Edited changes and published document.
2.8	Updated the document for Yealink T2xP/T3xG version x.70.0.x test with BroadWorks Release 18.sp1.
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2.10	Updated the document for Yealink TxP version x.71.0.x test with BroadWorks Release 19.sp1.
2.11	Edited changes and published document.
2.12	Updated document to reflect the correct Xtended Services Interface feature support by Yealink T2XP phones.
2.13	Edited changes and published document.
2.14	Updated document for error correction in the Device Management section where the tag set is altered with updated template files in the CPE kit.
2.15	Updated document to split SIP-TxP Series and SIP-T3xG Series into separate Partner Configuration Guides. This document will provide coverage to the SIP-TxP series.
2.16	Edited changes and published document.

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1 Overview

This document describes the configuration procedures required for a Yealink SIP-TxP series to make full use of the capabilities of BroadWorks. This includes the following models:

- SIP-T19P
- SIP-T20P
- SIP-T21P
- SIP-T22P
- SIP-T26P
- SIP-T28P

The SIP-TxP is one of the many desk phones that interoperate with BroadWorks.

The SIP-TxP uses the Session Initiation Protocol (SIP) to communicate with BroadWorks for call control. It also translates voice to audio packets for transmission across a packet network.

This guide describes the specific configuration items that are important for use with BroadWorks. It does not describe the purpose and use of all configuration items on the SIP-TxP. For more information, see the *Yealink TxP SIP Phone User Manual* [1] supplied by Yealink.

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2 Interoperability Status

This section provides the known interoperability status of the Yealink SIP-TxP with BroadWorks. This includes the version(s) tested, capabilities supported and known issues.

Interoperability testing validates that the device interfaces properly with BroadWorks via the SIP interface. Qualitative aspects of the device or device capabilities not affecting the SIP interface such as display features, performance, and audio qualities are not covered by interoperability testing. Requests for information and/or issues regarding these aspects should be directed to Yealink.

2.1 Verified Versions

The following table identifies the verified Yealink SIP-TxP and BroadWorks versions and the month/year the testing occurred. If the device has undergone more than one test cycle, versions for each test cycle are listed, with the most recent listed first.

Compatible Versions in the following table identifies specific SIP-TxP versions, which the partner has identified as compatible and should it interface properly with BroadWorks. Generally, maintenance releases of the validated version are considered compatible and may not be specifically listed here. Contact Yealink for any questions concerning maintenance and compatible releases.

NOTE: Interoperability testing is normally performed with the latest generally available (GA) device firmware/software and the latest GA BroadWorks release and service pack at the time the testing occurs. If there is a need to use a non-verified mix of BroadWorks and device software versions, customers can mitigate their risk by self-testing the combination using the *BroadWorks SIP Access Device Interoperability Test Plan* [4].

Verified Versions Table			
Date (mm/yyyy)	**BroadWorks Release**	**SIP-TxP Verified Version**	**SIP-TxP Compatible Versions**
08/2013	Release 19.sp1	SIP-T19P 31.71.0.15 SIP-T21P 34.71.0.60 SIP-T20P 9.71.0.110 SIP-T22P 7.71.0.110 SIP-T26P 6.71.0.110 SIP-T28P 2.71.0.110	x.72.x.x and any maintenance version of the verified versions.
11/2012	Release 18.sp1	SIP-T28P 2.70.0.60	Any maintenance version of the verified versions.

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Verified Versions Table			
Date (mm/yyyy)	**BroadWorks Release**	**SIP-TxP Verified Version**	**SIP-TxP Compatible Versions**
05/2011	Release 17.0	SIP-T12P 5.60.0.110 SIP-T20P 9.60.0.110 SIP-T21P 21.61.0.10 SIP-T22P 7.60.0.110 SIP-T26P 6.60.0.110 SIP-T28P 2.60.0.110 SIP-T80P 8.60.0.110	Any maintenance version of the verified version.
03/2011	Release 17.0	SIP-T18P 18.0.0.80	Any maintenance version of the verified versions.
10/2010	Release 17.0	SIP-T12P 5.51.0.10 SIP-T20P 9.51.0.10 SIP-T22P 7.51.0.10 SIP-T26P 6.51.0.10 SIP-T28P 2.51.0.10 SIP-T80P 8.51.0.10	Any maintenance version of the verified versions.

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by Yealink SIP-TxP.

The *Supported* column in the tables in this section identifies the Yealink SIP-TxP's support for each of the items covered in the test plan, with the following designations:

- Yes Test item is supported.
- No Test item is not supported.
- NA Test item is not applicable to the device type.
- NT Test item was not tested.

Caveats and clarifications are identified in the *Comments* column.

2.2.1 Interface Capabilities Supported

The Yealink SIP-TxP has completed interoperability testing with BroadWorks using the *BroadWorks SIP Access Device Interoperability Test Plan* [4]. The results are summarized in the following table.

The BroadWorks test plan is composed of packages, each covering distinct interoperability areas, such as "Basic" call scenarios and "Redundancy" scenarios. Each package is composed of one or more test items, which in turn, are composed of one or more test cases. The test plan exercises the SIP interface between the device and BroadWorks with the intent to ensure interoperability sufficient to support the BroadWorks feature set.

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NOTE: *DUT* in the following table refers to the *Device Under Test*, which in this case is the Yealink SIP-TxP.

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Basic	Call Origination	Yes	
	Call Termination	Yes	
	Session Audit	Yes	
	Session Timer	Yes	
	Ringback	Yes	
	Forked Dialog	Yes	
	181 Call Being Forwarded	Yes	
	Dial Plan	Yes	
	DTMF – Inband	Yes	
	DTMF – RFC 2833	Yes	
	DTMF – DTMF Relay	Yes	
	Codec Negotiation	Yes	
	Codec Renegotiation	Yes	
BroadWorks Services	Third-Party Call Control – Basic	NA	
	Third-Party Call Control – Advanced	Yes	
	Voice Message Deposit/Retrieval	Yes	
	Message Waiting Indicator	Yes	
	Voice Portal Outcall	Yes	
	Advanced Alerting – Ringing	Yes	
	Advanced Alerting – Call Waiting	Yes	
	Advanced Alerting – Ring Splash	Yes	
	Advanced Alerting – Silent Alerting	NT	
	Calling Line ID	Yes	
	Calling Line ID with Unicode Characters	Yes	
	Connected Line ID	Yes	
	Connected Line ID with Unicode Characters	Yes	
	Connected Line ID on UPDATE	Yes	
	Connected Line ID on Re-INVITE	Yes	
	Diversion Header	Yes	
	History-Info Header	Yes	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Advice of Charge	No	
	Meet-Me Conferencing	Yes	
	Meet-Me Conferencing – G722	NT	
	Meet-Me Conferencing – AMR-WB	No	
DUT Services – Call Control Services	Call Waiting	Yes	
	Call Hold	Yes	
	Call Transfer	Yes	
	Three-Way Calling	Yes	
	Network-Based Conference	Yes	
DUT Services – Registration and Authentication	Register Authentication	Yes	
	Maximum Registration	Yes	
	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating BroadWorks	No	
DUT Services – Emergency Call	Emergency Call	No	
	Emergency Call with Ringback	No	
DUT Services – Miscellaneous	Do Not Disturb	Yes	
	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Anonymous Call	Yes	
	Anonymous Call Block	Yes	
	Remote Restart Via Notify	Yes	
Advanced Phone Services – Busy Lamp Field	Busy Lamp Field	Yes	Except T19P
	Call Park Notification	Yes	
Advanced Phone Services – Feature Key Synchronization, Private Line	Do Not Disturb	Yes	
	Do Not Disturb Ring Splash	Yes	
	Call Forwarding	Yes	
	Call Forwarding Always Ring Splash	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Call Center Agent Logon/Logoff	Yes	
	Call Center Agent Unavailable Code	Yes	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Executive – Call Filtering	No	
	Executive-Assistant – Call Filtering	No	
	Executive-Assistant – Diversion	No	
	Call Recording	No	
	Security Classification	No	
Advanced Phone Services – Feature Key Synchronization, Shared Line	Do Not Disturb	Yes	
	Do Not Disturb Ring Splash	Yes	
	Call Forwarding	Yes	
	Call Forwarding Always Ring Splash	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Security Classification	No	
Advanced Phone Services – Missed Calls Display Synchronization	Missed Calls Display Sync	Yes	
Advanced Phone Services – Shared Call Appearance using Call Info	Line-Seize	Yes	
	Call-Info/Lamp Management	Yes	
	Public Hold	Yes	
	Private Hold	Yes	
	Hybrid Key System	Yes	
	Multiple Call Arrangement	Yes	
	Bridge Active Line	Yes	
	Bridge Active Line – Silent Monitor	No	
	Call Park Notification	Yes	
Advanced Phone Services – Call Park Notification	Call Park Notification	NT	
Advanced Phone Services – Call Center	Hold Reminder	Yes	
	Call Information	Yes	
	Hoteling Event	Yes	
	Status Event	Yes	
	Disposition Code	Yes	
	Emergency Escalation	Yes	
	Customer Originated Trace	Yes	
Advanced Phone Services – Call	Pause/Resume	No	
	Start/Stop	No	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Recording Controls	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Call Recording Video	Basic Call	NA	
	Record Local Conference	NA	
	Record Network Conference	NA	
Advanced Phone Services – Security Classification	Security Classification	No	
Redundancy	DNS SRV Lookup	Yes	
	Register Failover/Failback	Yes	
	Invite Failover/Failback	Yes	
	Bye Failover	Yes	
Session Border Controller (SBC)/Application Layer Gateway (ALG)	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
Video – Basic Video Calls	Call Origination	NA	
	Call Termination	NA	
	Call Hold	NA	
	Call Waiting	NA	
	Call Transfer	NA	
Video – BroadWorks Video Services	Auto Attendant	NA	
	Auto Attendant – HD	NA	
	Voice Messaging	NA	
	Voice Messaging – HD	NA	
	Custom Ringback	NA	
Video – BroadWorks Video Conference	Network-based Conference	NA	
	Network-based Conference – HD	NA	
TCP	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
IPV6	Call Origination	NT	
	Call Termination	NT	
	Session Audit	NT	
	Ringback	NT	
	Codec Negotiation/Renegotiation	NT	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Voice Message Deposit/Retrieval	NT	
	Call Control	NT	
	Registration with Authentication	NT	
	Busy Lamp Field	NT	
	Redundancy	NT	
	SBC	NT	
	Video	NT	
	Dual Stack with Alternate Connectivity	NT	

2.2.2 Other Interface Capabilities

The Yealink SIP-TxP firmware version v71 or above have implemented support for the following:

- BroadWorks Xtended Services Interface (Xsi)
- Extensible Messaging and Presence Protocol (XMPP) (BroadCloud Instant Messaging and Presence [IM&P])

Refer to the configuration in the following figure. Type in the related parameters and then click **Confirm**.

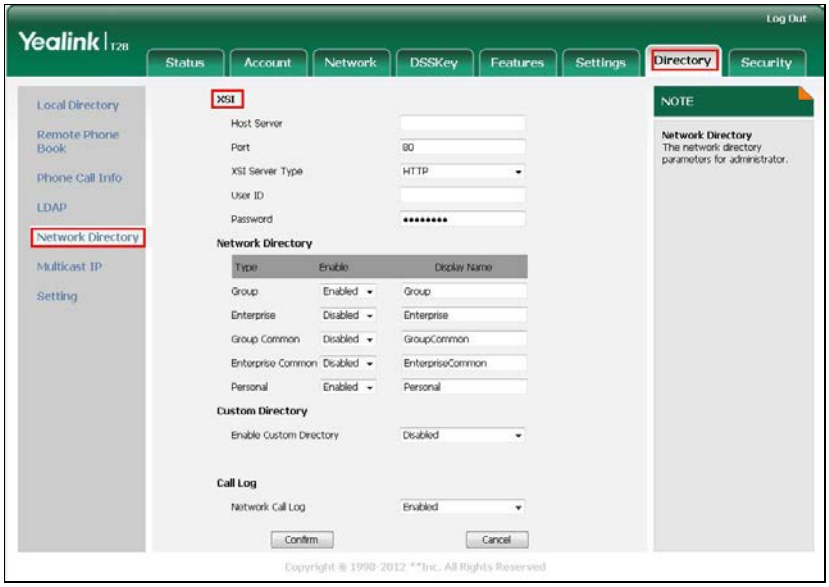

Figure 1 Other Interface Capabilities

Support for these interfaces are demonstrated by completing the *BroadWorks SIP Phone Functional Test Plan* [6]. Support for these interfaces is summarized in the following table.

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BroadWorks Xsi and BroadCloud IM&P Support Table			
Interface	**Feature**	**Supported**	**Comments**
Xsi Features – User Service Configuration	Remote Office	Yes	Adding Invalid Number, which fails for T22P, is not supported.
	BroadWorks Anywhere	Yes	Modifying an existing number by the DUT and *Alert all locations for Click-to-Dial calls* flag not in the DUT is not supported.
	Simultaneous Ring	Yes	The DUT does not have the *Do not ring my Simultaneous Ring Numbers if I'm already on a call* flag.
	Caller ID Blocking	Yes	
	Call Forward Always	No	
	Call Forward Busy	No	
	Call Forward No Answer	No	
	Do Not Disturb	Yes	The DUT does not have the *Play Ring Reminder when a call is blocked* flag.
Xsi Features - Directories	Enterprise Directory	Yes	
	Enterprise Common Phone List	Yes	
	Group Directory	Yes	
	Group Common Phone List	Yes	
	Personal Phone List	Yes	
	Search All Directories	Yes	
Xsi Features – Call Logs	Placed Calls	Yes	
	Received Calls	Yes	
	Missed Calls	Yes	
	All Calls	Yes	
	Sort by Name	No	
XMPP Features – Contact/Buddy List	Contacts	No	
	Favorites	No	
	Groups	No	
	Non-XMPP Contacts	No	
	Conferences	No	
XMPP Features - Presence	Login Invisible	No	
	Presence State	No	
	Presence Status	No	
	Contact's Presence State	No	

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2.3 Known Issues

This section lists the known interoperability issues between BroadWorks and specific partner release(s). Issues identified during interoperability testing and known issues identified in the field are listed.

The following table provides a description of each issue and, where possible, identifies a workaround. The verified partner device versions are listed with an "X" indicating that the issue occurs in the specific release. The issues identified are device deficiencies or bugs, and are typically not BroadWorks release dependent.

If the testing was performed by BroadSoft, then the *Issue Number* is a BroadSoft ExtraView partner issue number. If the testing was performed by the partner or a third party, then the partner may or may not supply a tracking number. For more information on any issues related to the particular partner device release, see the partner release notes.

Issue Number	Issue Description	Partner Version			
		x.51.0.10	X.70.X.X	X.71.X.X	
	Device Management – file download fails if Xtended Services Platform generates HTTP 302. The T2xP fails to download configuration files and firmware via the Xtended Services Platform if the Xtended Services Platform responds to the http get with a 302 redirect. This occurs in Xtended Services Platform farm scenarios and other scenarios in which the URL changes. Workaround: No workaround. This issue is resolved in T2xP version x.51.0.17.	X			
	Device Management – file download fails if T2xP upgrade URL is configured as an FQDN. The T2xP fails to download configuration files and firmware via the Xtended Services Platform if the phone's upgrade URL is configured as an FQDN. Workaround: Ensure the upgrade URL is configured as an IP address. This issue is resolved in T2xP version x.51.0.21.	X			

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3 BroadWorks Configuration

This section identifies the required BroadWorks device profile type for the Yealink SIP-TxP as well as any other unique BroadWorks configuration required for interoperability with the SIP-TxP.

3.1 BroadWorks Device Profile Type Configuration

This section identifies the device profile type settings to use when deploying the Yealink SIP-TxP with BroadWorks.

Create a device profile type for the Yealink SIP-TxP as shown in the following example. A separate device profile type should be created for each Yealink SIP-TxP model. The settings shown are recommended for use when deploying the Yealink SIP-TxP with BroadWorks. For an explanation of the profile parameters, see the *BroadWorks Device Management Configuration Guide* [2].

The following device profile type provides the *Number of Ports* (number of SIP lines) setting for Yealink SIP-T28P. For other SIP-TxP models, create a new device profile type and set the *Number of Ports* to match the available number of SIP lines per model according to the following table.

Model	Number of Lines
T19P	1
T20P	2
T21P	2
T22P	3
T26P	3
T28P	6

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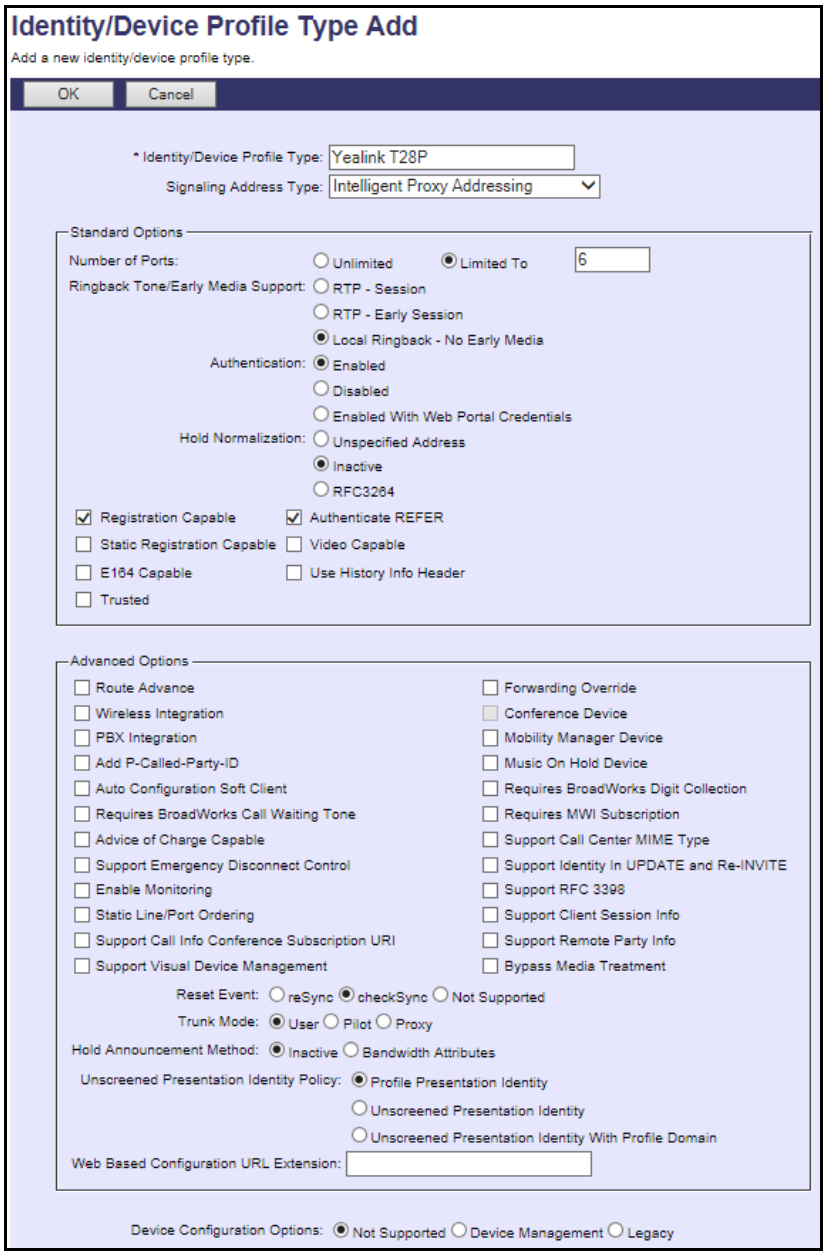

Figure 2 Adding Device Profile Type

3.2 BroadWorks Configuration Steps

No other steps are needed on BroadWorks for setting up the device.

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4 SIP-TxP Configuration

This section describes the configuration settings required for the SIP-TxP integration with BroadWorks, primarily focusing on the SIP interface configuration. The SIP-TxP configuration settings identified in this section have been derived and verified through interoperability testing with BroadWorks. For more information, see the *Yealink TxP SIP Phone User Guide* [1] for SIP-TxP configuration details not covered in this section.

4.1 Configuration Method

The SIP-TxP can be configured with a configuration file using the Trivial File Transfer Protocol (TFTP) or through its embedded web server. The following examples describe how to set the parameters using a configuration file. This configuration description assumes the SIP-TxP uses the Dynamic Host Configuration Protocol (DHCP) to obtain an IP address, TFTP server, and other network settings. The SIP-TxP should be configured to load the configuration file each time it resets or re-synchronizes. For detailed information on automated provisioning, see the *Yealink TxP SIP Phone User Guide* [1].

The capabilities of the SIP-TxP have been verified for use with BroadWorks based on the settings described in the following table. For more information on the meaning, purpose, and applicability of the individual configuration items see the *Yealink TxP SIP Phone User Guide* [1].

Configuration Files

Files Provided by Partner	Level	Description
y0000000000<xx>.cfg	system configuration file	“y0000000000xx.cfg”, where “xx” associated with the hardware version of Yealink Device, that is, y000000000000.cfg for Yealink SIPT28P.
<MACADDRESS>.cfg	device-specific configuration file	

4.2 System Level Configuration

This section describes system-wide configuration items that are generally required for each SIP-TxP to work with BroadWorks. Subscriber-specific settings are described in the next section.

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Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		
Step 1	**Set SIP Proxy/Domain.** **(Only for the firmware version lower than V71)** SIPServerHost = as.broadworks.net SIPServerPort = 5060 **(Only for the V71 and higher version)** account.x.sip_server_host = as.broadworks.net account.x.sip_server_port = 5060	Set the SIP-TxP series SIP server to the Fully Qualified Domain Name (FQDN) for the BroadWorks Application Server cluster. The domain must match the domain configured for the BroadWorks subscriber's line/port domain. **'x' should be replaced with the line port number that is to be configured.
Step 2	**Set Outbound Proxy.** **(Only for the firmware version lower than V71)** UseOutboundProxy = 1 OutboundHost = sbc.broadworks.net OutboundPort = 5060 **(Only for the V71 and higher version)** account.x.outbound_proxy_enable = 1 account.x.outbound_host = sbc.broadworks.net account.x.outbound_port =5060	Set the Outbound Proxy to the session border controller (SBC) if one is deployed between the SIP-TxP series and BroadWorks. If there are redundant SBCs, set it to the FQDN for the SBC cluster. **'x' should be replaced with the line port number that is to be configured.
Step 3	**Set SIP Timers.** **(Only for the firmware version lower than V71)** default_t1 = 0.5 default_t2 = 4 default_t3 = 5 **(Only for the V71 and higher version)** account.x.advanced.timer_t1 = 0.5 account.x.advanced.timer_t2 = 4 account.x.advanced.timer_t4 =5	The SIP timers should be set to levels short enough to support a timely failover when there is no server response. **'x' should be replaced with the line port number that is to be configured.
Step 4	**Set Register Expire Timer.** **(Only for the firmware version lower than V71)** Expire = 3600 **(Only for the V71 and higher version)** account.x.expires = 3600	Set the registration period. **'x' should be replaced with the line port number that is to be configured.

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Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		
Step 5	**Enable reliable response.** **(Only for the firmware version lower than V71)** Enable 100Rel = 1 **(Only for the V71 and higher version)** account.x.100rel_enable =1	Reliable provisional response (PRACK) should be enabled. **'x' should be replaced with the line port number that is to be configured.
Step 6	**Enable Session Timer.** **(Only for the firmware version lower than V71)** EnableSessionTimer = 1 SessionExpires = 300 SessionRefresher = 1 **(Only for the V71 and higher version)** account.x.session_timer.enable = 1 account.x.session_timer.expires = 300 account.x.session_timer.refresher =1	Set the SIP-TxP series to enable Session Timer. Session Refresher: 0: uac 1: uas **'x' should be replaced with the line port number that is to be configured.
Step 7	**Enable Call Waiting.** **(Only for the firmware version lower than V71)** Call_Waiting = 1 **(Only for the V71 and higher version)** call_waiting.enable = 1	Set the SIP-TxP series to enable Call Waiting and Call Waiting Tone.
Step 8	**Enable MWI.** **(Only for the firmware version lower than V71)** SubscribeMWI = 0 SubscribeMWIExpire = 3600 **(Only for the V71 and higher version)** account.1.subscribe_mwi = 0 account.1.subscribe_mwi_expires =3600	MWI: Solicited when setting SubscribeMWI = 1. MWI: Not solicited when setting SubscribeMWI = 0.

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Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		

Step 9	**Enable negotiated DTMF type.**
	(Only for the firmware version lower than V71)
	`DTMFInbandTransfer = 1`
	(Only for the V71 and higher version)
	`features.dtmf.transfer =`
		Set the SIP-T2P series to enable inband or RFC 2833 negotiated DTMF.

Step 10	**Select Transport Type.**
	(Only for the firmware version lower than V71)
	`Transport = 0`
	(Only for the V71 and higher version)
	`account.x.transport = 0`
		Set the SIP transport:
		Transport= 0 (UDP)
		Transport= 1 (TCP)
		Transport= 2 (TLS)
		Transport= 3 (DNS-SRV)
		**'x' should be replaced with the line port number that is to be configured.

Step 11	**Enable Feature Key Sync.** **(Only for the firmware version lower than V71)** **(Only for the firmware version lower than V71)** `BroadsoftFeatureKeySync = 1` **(Only for the V71 and higher version)** bw.feature_key_sync = 1	Enable Feature Key Sync: 1: Enable 0: Disable

4.3 Subscriber Level Configuration Parameters

This section identifies the device-specific parameters, including registration and authentication. These settings must be unique across devices to be matched with the settings for a BroadWorks subscriber.

Provisioning a subscriber to register with BroadWorks allows calls to terminate to the subscriber's line. Registration requires that a unique address of record (AoR) is provisioned on BroadWorks and the phone; provisioning an AoR on BroadWorks consists of setting the line/port parameter to a unique value within the Application Server cluster.

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Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 1	**Enable a line to be used.** Example: **(Only for the firmware version lower than V71)** Enable = 1 **(Only for the V71 and higher version)** account.x.enable = 1	Enable a line of the SIP-TxP series to be used. **'x' should be replaced with the line port number that is to be configured.
Step 2	**Configure display name for a line.** Example: **(Only for the firmware version lower than V71)** DisplayName = Joe **(Only for the V71 and higher version)** account.x.display_name = Joe	For the line, configure the name to be displayed on the device. **'x' should be replaced with the line port number that is to be configured.
Step 3	**Set Register User ID for a line.** Example: **(Only for the firmware version lower than V71)** UserName = 2405551111 **(Only for the V71 and higher version)** account.x.user_name = 2405551111	The *register user ID* must correspond with the line/port setting on BroadWorks. **'x' should be replaced with the line port number that is to be configured.
Step 4	**Enable SIP Authentication for a line.** Example: **(Only for the firmware version lower than V71)** AuthName = 2405551111 password = 123456 **(Only for the V71 and higher version)** account.x.auth_name = 2405551111 account.x.password = 123456	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings. **'x' should be replaced with the line port number that is to be configured.

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Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 5	**Configure eventlist BLF for a line.** BLFList_URI = <broadworks-blf-list-uri> Example: **(Only for the firmware version lower than V71)** BLFList_URI = myblflist@as.iop1.broadworks.net **(Only for the V71 and higher version)** account.x.blf.blf_list_uri = myblflist@as.iop1.broadworks.net	Configure the *eventlist* busy line field (BLF) on the *Account Settings* page to match the BroadWorks busy lamp field list URI setting for the user. **'x' should be replaced with the line port number that is to be configured.
Step 6	**Configure Network Conference for a line.** **(Only for the firmware version lower than V71)** conf-type = 2 conf-uri = <broadworks conference uri> Example: conf-uri = conf@as.iop1.broadworks.net **(Only for the V71 and higher version)** account.x.conf_type = 2 account.x.conf_uri = conf@as.iop1.broadworks.net	Select the *Network Conference* type and the *conference-uri* from the *Account Settings* page. The *conference-uri* must match the BroadWorks configured *conference-uri* setting. **'x' should be replaced with the line port number that is to be configured.

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Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 7	**Configure Network Phonebook for a line.** **(Only for the firmware version lower than V71)** DisplayName = Broadsoft Phonebook Server = http://xsp1.iop1.broadworks.net/com.broadsoft.xsi-actions/v1.0/user/2413333610@as.iop1.broadworks.net/directories/calllogs/placed Port = 8080 UserName = 2413333601@as.iop1.broadworks.net PassWord = yealink **(V71 supports XSI format, use the configuration below)** account.x.xsi.user = Broadsoft Phonebook account.x.xsi.password = yealink account.x.xsi.host = http://xsp1.iop1.broad works.net/ account.x.xsi.server_type =http account.x.xsi.port =8080	This configures the phone to use the BroadWorks Xsi interface to retrieve the group phone directory. Server: This is the identity of the BroadWorks Xsp server/cluster address and relevant xsi-actions parameters. UserName: This is the BroadWorks user's login name. PassWord: This is the BroadWorks user's login password. **'x' should be replaced with the line port number that is to be configured.

4.4 Advanced SIP Features Configuration

This section provides configuration instructions for advanced SIP features supported by the phone including but not limited to Shared Call Appearance, Busy Lamp Field, Feature Key Synchronization, Call Center, and Emergency Call.

4.4.1 Shared Call Appearance Configuration

The Shared Call Appearance (SCA) feature allows the administrator to add multiple locations to a given line. Any of the locations can be used to originate or receive calls.

When a call comes in to an idle line, all the provisioned locations for that line are alerted. The first location to answer the call is connected to the originator. If the line is already active in a call, only the active location is alerted.

A subscriber can originate calls from any of the configured locations. All other locations are unable to originate calls until all calls are released.

It is recommended that the phone number plus an index (<phoneNumber>_<index>) is used when provisioning the unique address of record (AoR) for each shared line. For example: 2405551111_2. If a phone number does not exist, the MAC address plus an index could be used (<macAddress>_<index>).

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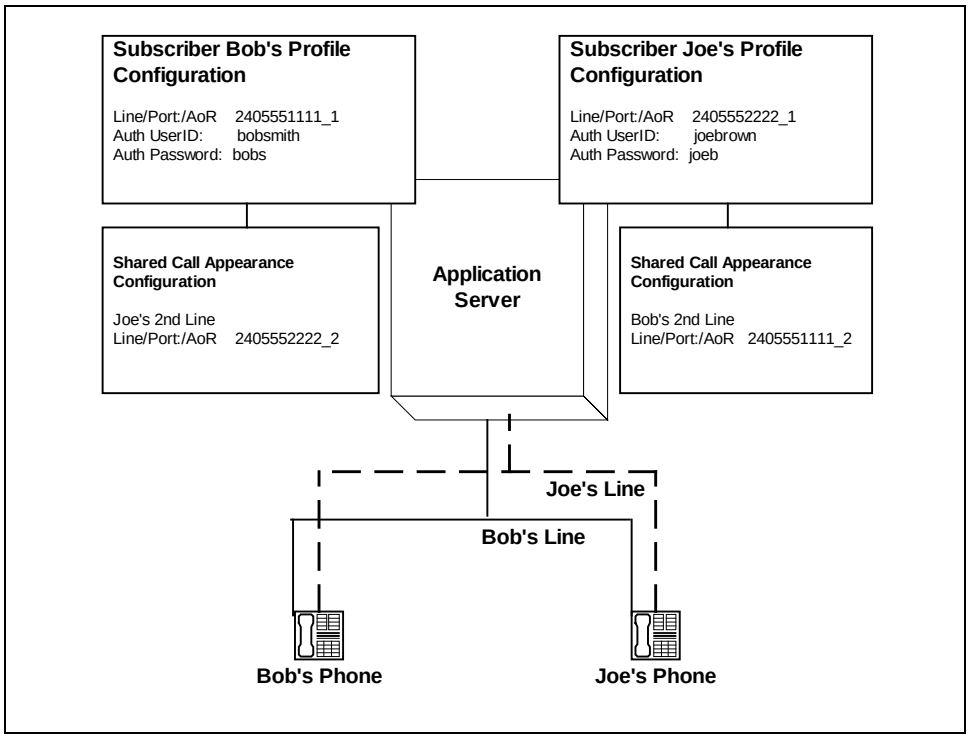

Figure 3 Shared Call Appearance Flow

Figure 2 shows that Bob and Joe each have two lines and that Bob shares a line with Joe and Joe shares a line with Bob. The figure also shows the applicable Subscriber Profile and Shared Call Appearance Configuration data for subscribers Bob and Joe.

When Bob (2405551111) is called, Bob's first line and Joe's second line will ring. When Joe (2405552222) is called, Joe's first line and Bob's second line will ring.

The following steps show how to configure both phones for this Shared Call Appearance configuration.

For configurations of SCA for the device, see the example in the following section.

4.4.1.1 Bob's Phone Configuration – MAC.cfg

This is the SCA configurations as specified in MAC.cfg, that is, 0015651130dc.cfg where "0015651130dc" is the MAC address of the SIP phone.

The following steps are used to configure line 1 for Bob's phone. This line rings when Bob is called, so it has Bob's authentication information.

Step	Command	Purpose

Step 1	**Configure line as shared.**
	(Only for the firmware version lower than V71)
	`ShareLine = 1;`
	(Only for the V71 and higher version)
	`account.1.shared_line =1`
		Configure the line as "shared" (as opposed to "private").

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Step	Command	Purpose
Step 2	**Set Register User ID.** Example: **(Only for the firmware version lower than V71)** UserName = 2405551111_1; **(Only for the V71 and higher version)** account.1.user_name = 2405551111_1	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	**Enable SIP Authentication.** Example: **(Only for the firmware version lower than V71)** AuthName = bobsmith; password = bobs; **(Only for the V71 and higher version)** account.1.auth_name = bobsmith account.1.password = bobs	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings. This line rings when Bob is called, so it has Bob's authentication information.
Step 4	Configure display name. Example: **(Only for the firmware version lower than V71)** DisplayName = Bob Smith; **(Only for the V71 and higher version)** account.1.display_name = Bob Smith	Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Bob's phone. This line rings when Joe is called, so it has Joe's authentication information.

Step	Command	Purpose
Step 1	**Configure line as shared.** **(Only for the firmware version lower than V71)** ShareLine = 1; **(Only for the V71 and higher version)** account.2.shared_line =1	Configure the line as "shared" (as opposed to "private").

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Step	Command	Purpose
Step 2	**Set Register User ID.** Example: **(Only for the firmware version lower than V71)** UserName = 2405551111_2; **(Only for the V71 and higher version)** account.2.user_name = 2405551111_2	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	**Enable SIP Authentication.** Example: **(Only for the firmware version lower than V71)** AuthName = joebrown; password = joeb; **(Only for the V71 and higher version)** account.2.auth_name = joebrown account.2.password = joeb	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings. This line rings when Joe is called, so it has Joe's authentication information.
Step 4	**Configure display name.** Example: **(Only for the firmware version lower than V71)** DisplayName = Joe Brown; **(Only for the V71 and higher version)** account.2.display_name = Joe Brown	Configure the name to be displayed on the device for this line.

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4.4.1.2 Joe's Phone Configuration – MAC.cfg

The following steps are used to configure line 1 for Joe's phone. This line rings when Joe is called, so it has Joe's authentication information.

Step	Command	Purpose

Step 1	**Configure line as shared.**
	(Only for the firmware version lower than V71)
	`ShareLine = 1;`
	(Only for the V71 and higher version)
	`account.1.shared_line =1`
		Configure the line as "shared" (as opposed to "private").

Step 2	**Set Register User ID.**
	`Example:`
	(Only for the firmware version lower than V71)
	`UserName = 2405552222_1;`
	(Only for the V71 and higher version)
	`account.1.user_name = 2405552222_1`
		The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication.**
	`Example:`
	(Only for the firmware version lower than V71)
	`AuthName = joebrown;`
	`password = joeb;`
	(Only for the V71 and higher version)
	`account.1.auth_name = joebrown`
	`account.1.password = joeb`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Joe is called, so it has Joe's authentication information.

Step 4	**Configure display name.**
	`Example:`
	`DisplayName = Joe Brown;`
		Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Joe's phone. This line rings when Bob is called, so it has Bob's authentication information.

Step	Command	Purpose

Step 1	**Configure line as shared.**
	(Only for the firmware version lower than V71)
	`ShareLine = 1;`
	(Only for the V71 and higher version)
	`account.2.shared_line =1`
		Configure the line as "shared" (as opposed to "private").

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Step	Command	Purpose
Step 2	**Set Register User ID.** Example: **(Only for the firmware version lower than V71)** UserName = 2405552222_2; **(Only for the V71 and higher version)** account.2.user_name = 2405552222_2	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	**Enable SIP Authentication.** Example: **(Only for the firmware version lower than V71)** AuthName = bobsmith; password = bobs; **(Only for the V71 and higher version)** account.2.auth_name = bobsmith account.2.password = bobs	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings. This line rings when Bob is called, so it has Bob's authentication information.
Step 4	**Configure display name.** Example: **(Only for the firmware version lower than V71)** DisplayName = Bob Smith; **(Only for the V71 and higher version)** account.2.display_name = Bob Smith	Configure the name to be displayed on the device for this line.

4.4.1.3 Hybrid Key System Configuration

Hybrid Key System emulation requires the phone to support assignment of multiple line keys to a single registering line on the phone. It also requires the phone to limit each line key to a single call appearance or provide the configurability to roll a new call over to the next free line key. Any of the locations can be used to originate or receive calls.

First, from the *Shared Call Appearance* configuration web page, select **Add** to add a second appearance.

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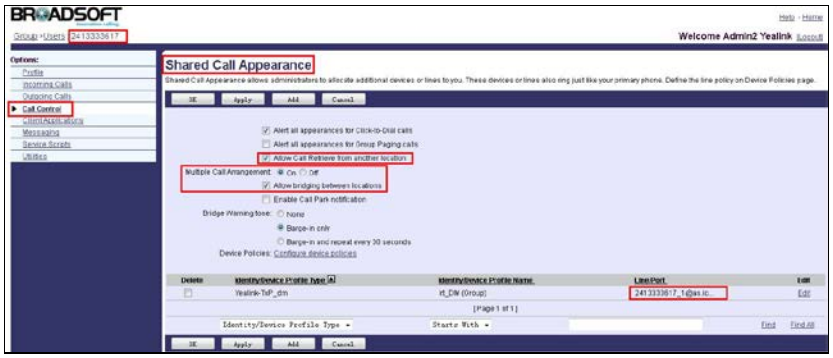

Figure 4 Shared Call Appearance Configuration Page

Second, from the *Account* tab, fill out the information as shown in the following figure:

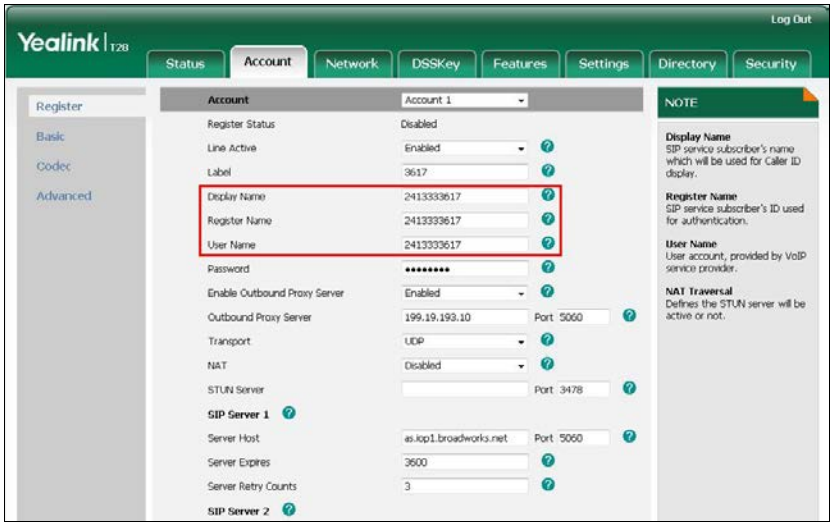

Figure 5 Account Register Page

Third, all of the advanced settings of the host and the other appearance lines must enable the BroadSoft SCA feature (as shown in the following figure). This field is found under *Account →Advanced →Shared Line*.

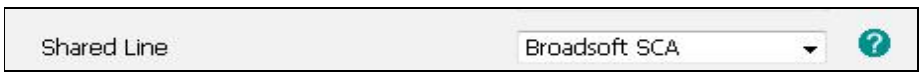

Figure 6 Shared Line Setting

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The following steps are used to assign multiple line keys to the line for Bob's phone.

Step	Command	Purpose
Step 1	Set DSS Key. Example: linekey.1.type =15 linekey.1.line = 1	Set memory key to line and apply this key type (line) to the shared line. key type: 15-line. line ID: 0:line1 1:line1 2:line2 3:line3 4:line4 5:line5 6:line6
Step 2	Set DSS Key. Example: linekey.2.type = 15 linekey.2.line = 1	Set memory key to line and apply this key type (line) to the shared line. key type: 15-line line ID: 0:line1 1:line1 2:line2 3:line3 4:line4 5:line5 6:line6

The following steps are used to assign multiple memory keys to the line for Joe's phone.

Step	Command	Purpose
Step 1	Set DSS Key. Example: linekey.1.type = 15 linekey.1.line = 1	Set memory key to line and apply this key type (line) to the shared line. key type: 15-line line ID: 0:line1 1:line1 2:line2 3:line3 4:line4 5:line5 6:line6

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The *Line Key* setting is shown in the following figure.

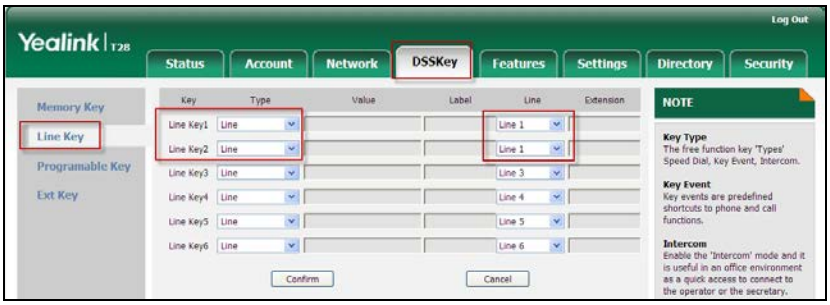

Figure 7 Line Key Setting

4.4.2 Busy Lamp Field Configuration

The Busy Lamp Field (BLF) implementation provides an attendant console function. Configure the phone to enable Busy Lamp Field as follows.

Step	Command	Purpose
Step 1	Set the BLF List URI for the line. Example: account.1.blf.blf_list_uri = *MyBLFList@BroadWorks.com*.	The BLF List URI must be configured to match the BroadWorks settings.

On the BroadWorks server configure as follows:

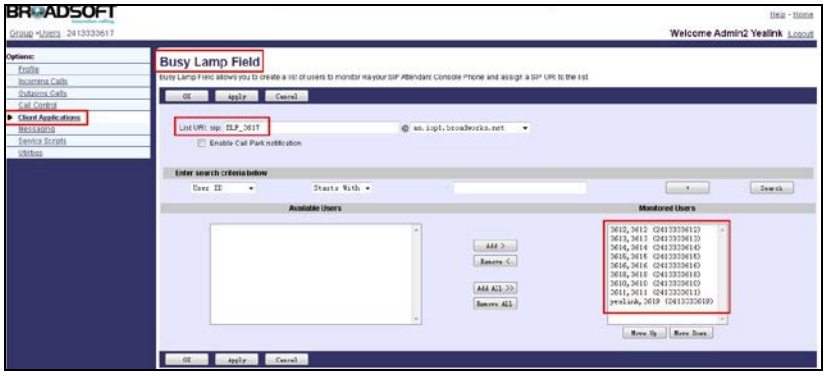

Figure 8 Busy Lamp Field

Browse to *Account → Advanced → BLF List URI/BLF List Code/BLF List Barge In Code*

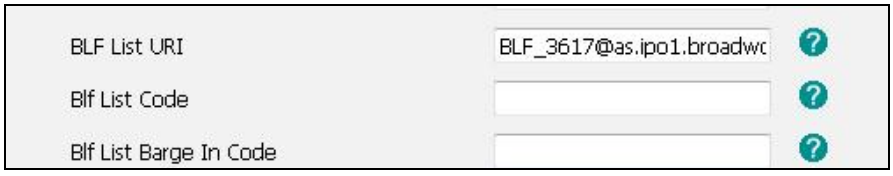

Figure 9 BLF List URI/BLF List Code/BLF List Barge In Code

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Other related parameters are as follows.

Parameter	Value	Purpose
bw.directory_enable	0 1	Enable BSFT feature. ▪ 0 for Disabled ▪ 1 for Enable
account.X.blf_list_code =	String	*98 (For example)
phone_setting.auto_blf_list_enable	0 1	Enable or disable auto blf list. ▪ 0 for Disabled ▪ 1 for Enable
phone_setting.blf_list_sequence_type	0 1	Configure the priority of auto blflist. ▪ 0 for linekey,memory,exp (Default) ▪ 1 for Exp,memory,linekey.

4.4.3 Feature Key Synchronization Configuration

Feature Key Synchronization provides synchronization of phone services such as *Call Forwarding* and *Do Not Disturb* with the settings on BroadWorks for analogous services. Configure the phone to enable Feature Key Synchronization as follows.

Step	Command	Purpose
Step 1	Enable Feature Key Synchronization. Example: bw.feature_key_sync = 1	Enable Feature Key Synchronization feature. ▪ 0 for Disabled ▪ 1 for Enable

The configure path of this web page is as follows:

Features → General Information → Features Key Synchronization（Enabled).

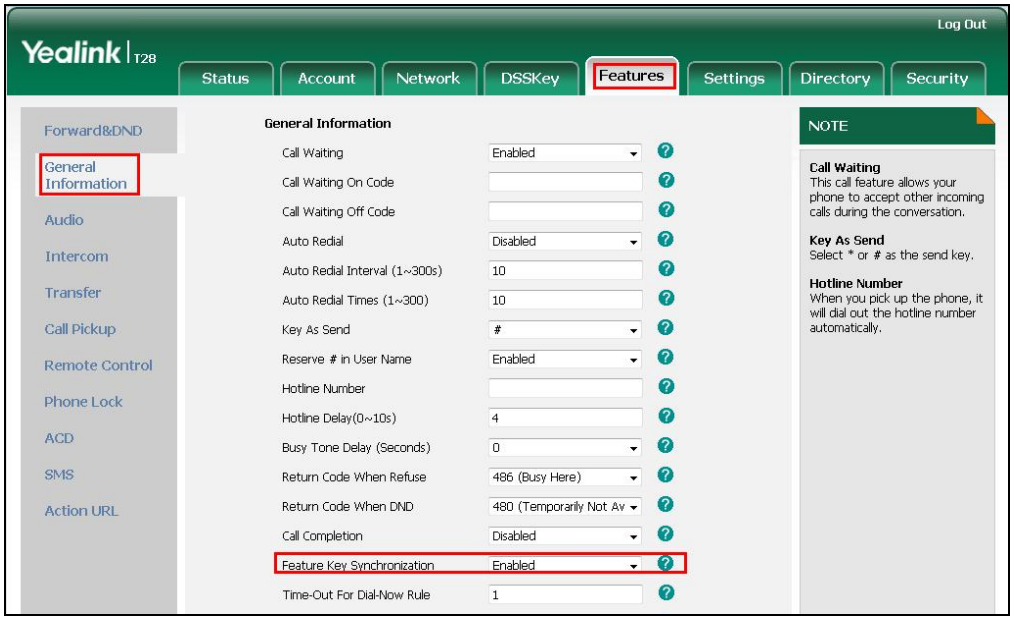

Figure 10 Feature Key Synchronization Field

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4.4.4 Call Center Feature Configuration

This section provides configuration instructions to configure the phone to enable integration with BroadWorks Call Center features including, but not limited to, call information, hoteling, status, and disposition codes. The Call Center feature is supported with firmware v71 or above.

1) Go to the Call Centers configuration page.

Figure 11 Call Center Configuration

2) Register the Call Center line.

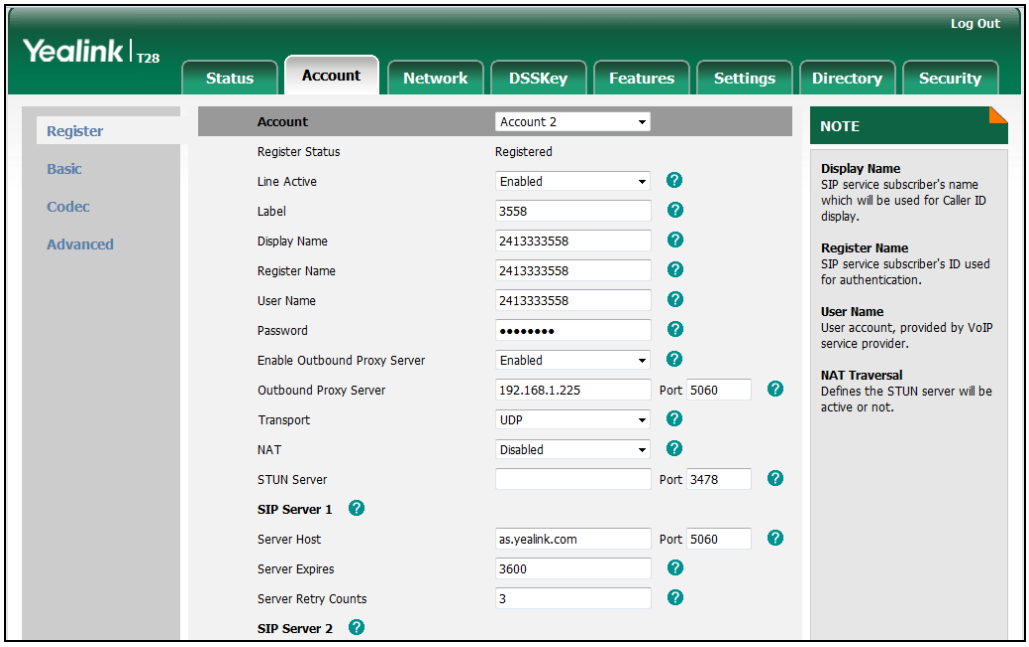

Figure 12 Register Account Page

3) Set the SIP Server Type to "Broadsoft" on the *Advanced* menu of the *Account* page.

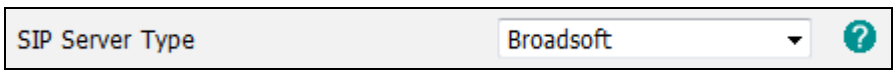

Figure 13 SIP Server Type Field

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4) Refer to the related parameters listed in the following table to configure the Call Center features.

Parameter	Value	Description/Notes
account.X.acd.enable = 1	0 1	Enable or disable ACD feature for Account X. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.call_center.call_info_enable = 1	0 1	Enable or disable the call center call information feature. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.call_center.show_call_info_time =	Number	Specify the duration (in seconds) that the phone displays the call center call information. The default value is 30 seconds
account.X.call_center.queue_status_enable = 1	0 1	Enable or disable the call center queue status notification feature. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.call_center.queue_status_light_enable = 1	0 1	Enable or disable the power indicator LED to indicate the queue status. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.call_center.disp_code_enable = 1	0 1	Enable or disable the call center disposition code feature. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.bw_disp_code.Y =	Number	Specify the call center disposition code for account X. Y must be continuous and ranges from 1 to 100.
account.X.bw_disp_code_name.Y =	String	Specify the disposition name for account X.
account.X.call_center.trace_enable = 1	0 1	Enable or disable the call center customer originated trace feature. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.call_center.emergency_enable = 1	0 1	Enable or disable the call center emergency escalation feature. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.supervisor_info_code.Y =	String	Specify the call center supervisor code for account X. The maximum length of the value is 30 characters.
account.X.supervisor_info_code_name.Y =	String	Specify the supervisor name for account X. The maximum length of the value is 99 characters.

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Parameter	Value	Description/Notes
account.X.acd.unavailable_reason_enable = 1	0 1	Enable or disable the call center unavailable reason code feature. ▪ 0 for Disabled (default) ▪ 1 for Enabled
account.X.reason_code.Y =	String	Specify the call center unavailable code for account X. The maximum length of the value is 10 characters.
account.X.reason_code_name.Y =	String	Specify the call center unavailable reason for account X. The maximum length of the value is 40 characters.
account.X.hoteling.enable = 1	0 1	Enable or disable the hoteling feature for account X. ▪ 0 for Disabled (default) ▪ 1 for Enabled

4.5 Xtended Services Interface (Xsi) Feature Configuration

This section provides configuration instructions for configuration of Xtended Services Interface features supported by the phone, including but not limited to, BroadWorks Directory and BroadWorks Call Logs.

To configure the Xtended Services Interface feature, go to *Directory → Network Directory → XSI*.

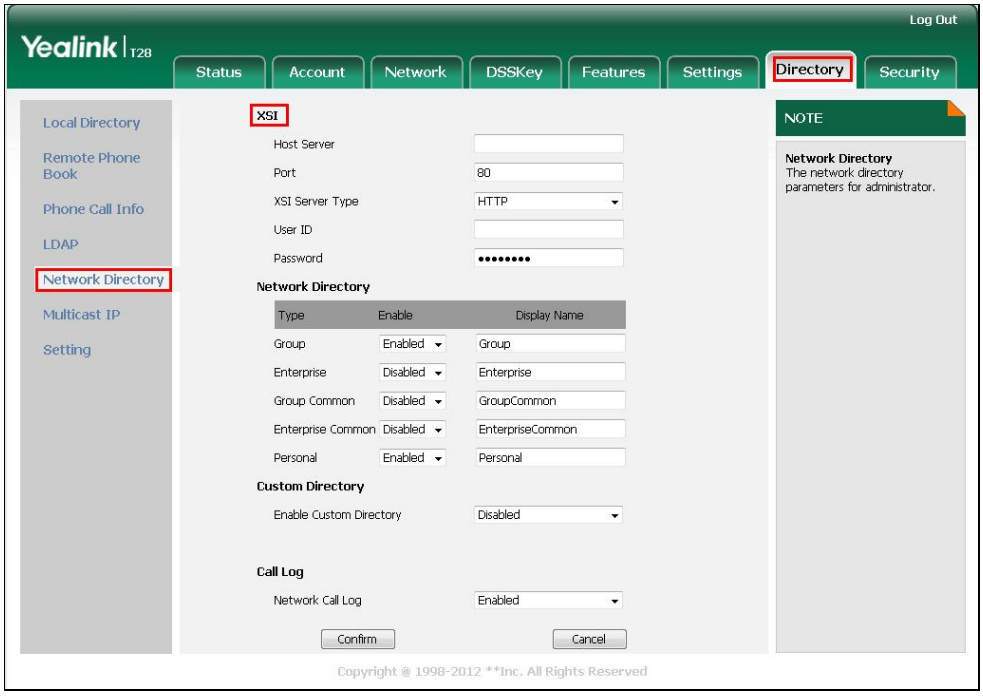

Figure 14 Xsi Feature Configuration

Type in the related parameters and then click **Confirm**.

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This section provides configuration instructions for configuration of Xtended Services Interface features supported by the phone, including but not limited to, BroadWorks Directory and BroadWorks Call Logs.

4.5.1 BroadWorks User Service Configuration

Integration with the BroadWorks Xtended Services Interface for User Service Configuration enables the phone to display and configure BroadWorks user services such as Remote Office, BroadWorks Anywhere, Call Forwarding, and Simultaneous Ring. To enable user service configuration, follow the instructions as shown in the following table.

Step	Command	Purpose
Step 1	account.1.xsi.user= account.1.xsi.password = Example: account.1.xsi.user= 2405551111 account.1.xsi.password = 123456	Set the Xsi login user name and password for line 1.
Step 2	account.1.xsi.host = Example: account.1.xsi.host =xsp1.iop1.broadworks.net	Set the IP address or domain name of the Xsp server.
Step 3	account.1.xsi.server_type = Example: account.1.xsi.server_type =http	Set the transport type for Xsi.
Step 4	account.1.xsi.port = Example: account.1.xsi.port =80	Set the transport port for Xsi.

4.5.2 BroadWorks Directory Configuration

Integration with the BroadWorks Xtended Services Interface for Directories enables the phone to download personal, group, and enterprise directories from BroadWorks and make them available to a user via the phone menus. To enable this feature, use the following instructions.

Step	Command	Purpose
Step 1	Enable the group directory to be displayed on the IP phone. Example: bw_phonebook.group_enable = 1	Enable the group directory to be displayed on the IP phone. ▪ 0 for Disable ▪ 1 for Enable
Step 2	Configure the group directory name displayed on the IP phone. Example: bw_phonebook.group_displayname = *Group*	Configure *Group* as the group directory name displayed on the IP phone. The default value is Group.
Step 3	Configure the group common directory to be displayed on the IP phone. Example: bw_phonebook.group_common_enable = 1	Enable the group common directory to be displayed on the IP phone. ▪ 0 for Disable ▪ 1 for Enable

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Step	Command	Purpose
Step 4	Configure the group common directory name displayed on the IP phone. Example: bw_phonebook.group_common_displayname = *GroupCommon*	Configure *GroupCommon* as the group common directory name displayed on the IP phone. The default value is “GroupCommon”.
Step 5	Configure the enterprise directory to be displayed on the IP phone. Example: bw_phonebook.enterprise_enable = 1	Enable the enterprise directory to be displayed on the IP phone. ▪ 0 for Disable ▪ 1 for Enable
Step 6	Configure the enterprise directory name displayed on the IP phone. Example: bw_phonebook.enterprise_displayname = *Enterprise*	Configure *Enterprise* as the enterprise directory name displayed on the IP phone. The default value is “Enterprise”.
Step 7	Enable the enterprise common directory to be displayed on the IP phone. Example: bw_phonebook.enterprise_common_enable = 1	Enable the enterprise common directory to be displayed on the IP phone. ▪ 0 for Disable ▪ 1 for Enable
Step 8	Configure the enterprise common directory name displayed on the IP phone. Example: bw_phonebook.enterprise_common_displayname = *EnterpriseCommon*	Configure *EnterpriseCommon* as the enterprise common directory name displayed on the IP phone. The default value is “EnterpriseCommon”.
Step 9	Enable the personal directory to be displayed on the IP phone. Example: bw_phonebook.personal_enable = 1	Enable the personal directory to be displayed on the IP phone. ▪ 0 for Disable ▪ 1 for Enable
Step 10	Configure the personal directory name displayed on the IP phone. bw_phonebook.personal_displayname = *Personal*	Configure “Personal” as the personal directory name displayed on the IP phone. The default value is “Personal”.
Step 11	Enable the custom directory feature. Example: bw_phonebook.custom = 1	Enable the custom directory feature. ▪ 0 for Disable ▪ 1 for Enable

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4.5.3 BroadWorks Call Logs Configuration

Integration with the BroadWorks Xtended Services Interface for Call Logs enables the phone to get call log history (missed, placed, and received calls) from BroadWorks and make them available to a user via the phone menus.

Step	Command	Purpose
Step 1	Enable the BroadSoft call log feature. Example: bw_phonebook.call_log_enable = 1	Enable BroadWorks call log feature. ▪ 0 for Disable ▪ 1 for Enable

Configure Call Logs as shown in the following figure.

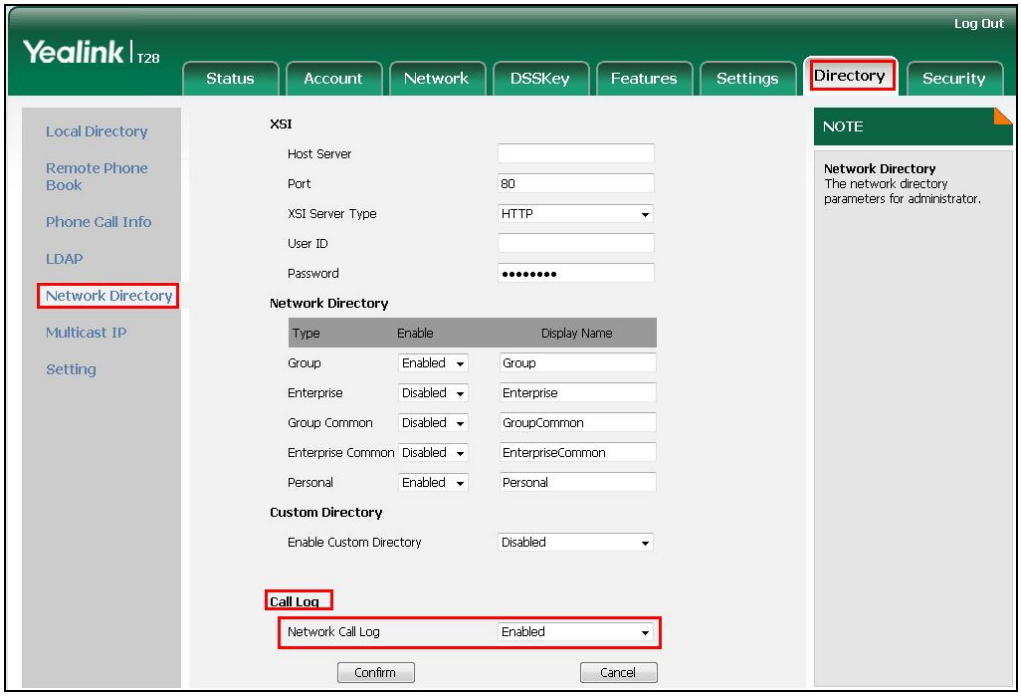

Figure 15 Call Logs Configuration

4.5.4 BroadWorks Call Park Configuration

Integration with the BroadWorks Xtended Services Interface for Call Park makes call park available to a user via the phone menus. To enable this feature, use the following instructions.

Step	Command	Purpose
Step 1	Enable call park feature for the line. Example: account.1.callpark_enable= 1	Enable call park feature. ▪ 0 for Disable ▪ 1 for Enable

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Step	Command	Purpose
Step 2	Enable the phone to display the Park soft key during a call. Example: call_park.enable = 1	The Park soft key appears on the LCD screen during a call. ▪ 0 for Disable ▪ 1 for Enable
Step 3	Enable the phone to display the GPark soft key during a call. Example: call_park.group_enable= 1	The GPark soft key appears on the LCD screen during a call. ▪ 0 for Disable ▪ 1 for Enable
Step 4	Enable the phone to play a warning tone when a call is parked against its line. Example: call_park.park_ring = 1	Enable the phone to play a warning tone when a call is parked against its line. ▪ 0 for Disable ▪ 1 for Enable
Step 5	Enable the phone to display a parked indicator when a call is parked against its line. Example: call_park.park_visual_notify_enable = 1	Enable the phone to display a parked indicator when a call is parked against its line. ▪ 0 for Disable ▪ 1 for Enable

Configure Call Park as shown in the following figure.

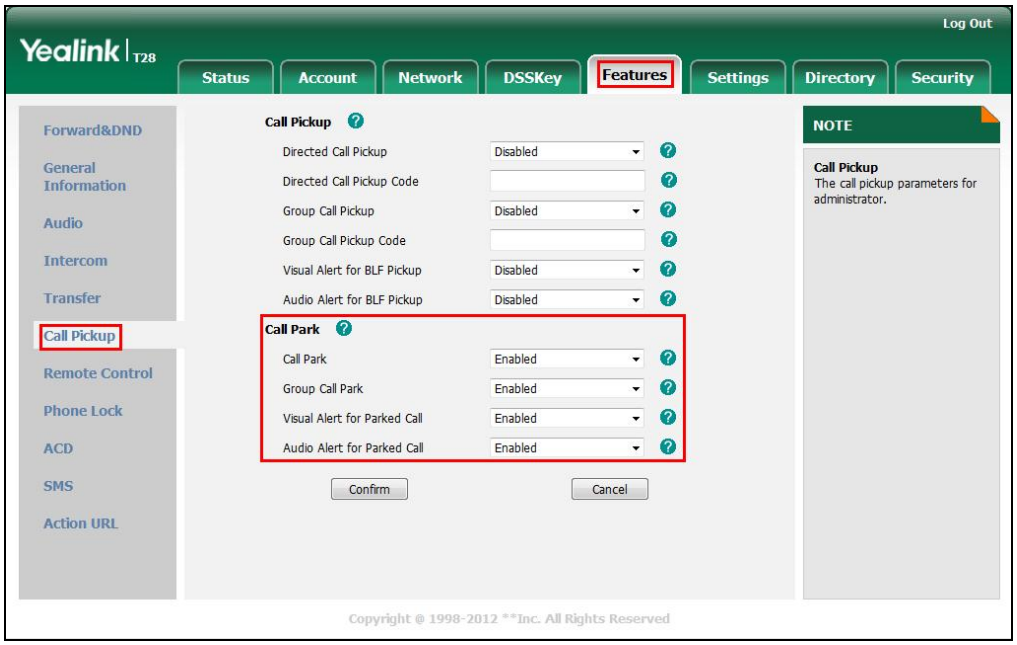

Figure 16 Call Park Configuration

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5 Device Management

The BroadWorks Device Management feature provides the capability to automate generation of device configuration files to support mass deployment of devices. This section identifies the device management capabilities supported by the Yealink SIP-TxP and the configuration steps required. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2].

The basic steps to integrate a device with Device Management are as follows:

1) Create device template files for the device with the appropriate BroadWorks Device Management tags.
2) Define custom and system tags and add them to the *device template* files. Note that these custom and system tags must also be defined on BroadWorks.
3) Create a device profile type on BroadWorks for each device model to be integrated with Device Management.
4) Add the device template files and other associated files to the device profile type.
5) Create a device profile instance of the device profile type and assign it to a user. A user name and password are assigned to this device profile.
6) The end device is configured with the Device Management URL for device files, as well as the user name/password access credentials.

This section describes the steps to integrate the Yealink SIP-TxP phones.

As part of the Yealink SIP-TxP CPE kit, BroadSoft has defined a standard device configuration in the device template files that service providers can use on their systems. These files can be uploaded directly to Device Management without modification. However, the service provider also has the option to modify these template files as required to fit their deployment needs.

The CPE kit also includes tools to help automate the integration effort. For releases after Release 17.0, there is a Device Management import/export utility. The CPE kit contains DTAF files that can be used to import the device type and template files.

5.1 Device Management Capabilities Supported

The Yealink SIP-TxP has completed Device Management interoperability testing with BroadWorks using the *BroadWorks Device Management Interoperability Test Plan* [5]. The results are summarized in the following table.

The BroadWorks test plan is composed of packages, each covering distinct interoperability areas. Each package is composed of one or more test items, which in turn are composed of one or more test cases. The test plan exercises the Device Management interface between the device and BroadWorks with the intent to ensure interoperability.

The *Supported* column in the following table identifies the Yealink SIP-TxP's support for each of the items covered in the test plan packages, with the following designations:

- Yes Test item is supported.
- No Test item is not supported.
- NA Test item is not applicable.
- NT Test item was not tested.

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Caveats or clarifications are identified in the *Comments* column.

NOTE: *DUT* in the following table refers to the *Device Under Test*, which in this case is the Yealink SIP-TxP.

BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
HTTP File Download	HTTP Download Using Xtended Services Platform (Xsp) IP Address	Yes	
	HTTP Download Using Xtended Services Platform FQDN	Yes	
	HTTP Download Using Xtended Services Platform Cluster FQDN	Yes	
	HTTP Download With Double Slash	Yes	
HTTPS File Download	HTTPS Download Using Xtended Services Platform IP Address	Yes	
	HTTPS Download Using Xtended Services Platform FQDN	Yes	
	HTTPS Download Using Xtended Services Platform Cluster FQDN	Yes	
File Inspection	Inspect System Config File	Yes	
	Inspect Device-Specific Config File	Yes	
	Inspect Other Config Files	Yes	
	Inspect Static Files	Yes	
Device Inspection	Inspect SIP Settings	Yes	
	Inspect Line Settings	Yes	
	Inspect Service Settings	Yes	
HTTP File Upload	HTTP Upload Using Xtended Services Platform IP Address	No	
	HTTP Upload Using Xtended Services Platform FQDN	No	
	HTTP Upload Using Xtended Services Platform Cluster FQDN	No	
Call Processing Sanity Tests	Register with Authentication	Yes	
	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	Yes	
	Shared Line Origination	Yes	
	Shared Line Termination	Yes	
	Shared Line Status	Yes	

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BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Busy Lamp Field	Yes	Except T19P
	Network-Based Conference	Yes	
Flexible Seating	Association via Voice Portal	NT	
	Association via Phone	NT	

5.2 Device Management Configuration

This section identifies the steps required to enable the Yealink SIP-TxP phones for device management. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2].

5.2.1 Configure BroadWorks Tags

The template files in Device Management use tags to represent the data stored on BroadWorks. When a configuration changes for a user, Device Management parses the template files and replaces the Device Management tags with the associated data stored on BroadWorks. There are default tags defined in the Device Management software and there are custom tags that the service provider can create/define via the web portal for use by Device Management. There are two types of custom tags that can be defined: system-default tags are common to all phones on the system; device-type-specific tags are common to Yealink phone models only.

The Yealink SIP-TxP makes use of dynamic tags, which may be configured by a BroadWorks administrator as either system default or device type specific tags. This section identifies the required tags.

5.2.1.1 Create System Default Tags

Browse to *System* → *Resources* → *Device Management Tag Sets* and select the *System Default* tag set. Yealink configuration templates make use of the tags in the following table. Add the tags if they do not already exist.

Tag Name	Valid Settings	Description
%SNTP_SERVER_1%	IP address/FQDN	Network Time Protocol (NTP) server address.
%SNTP_SERVER_2%	IP address/FQDN	NTP server address alternate.
%DNS_SERVER_1%	IP address	DNS server address.
%DNS_SERVER_2%	IP address	DNS server address alternate.
%SBC_ADDRESS%	IP address/FQDN	SBC SIP address.
%SBC_PORT%	Port	SBC SIP port. The port should be set if the defined SBC address is an IP address. If the SBC address is an FQDN, the SBC port should be left unset.
%USE_SBC_BOOLEAN%	0/1	Use SBC: 1=yes, 0=no.
%XSP_ADDRESS_XSI_ACTIONS%	String	Defines the Xsi host URL for performing Xsi Actions.

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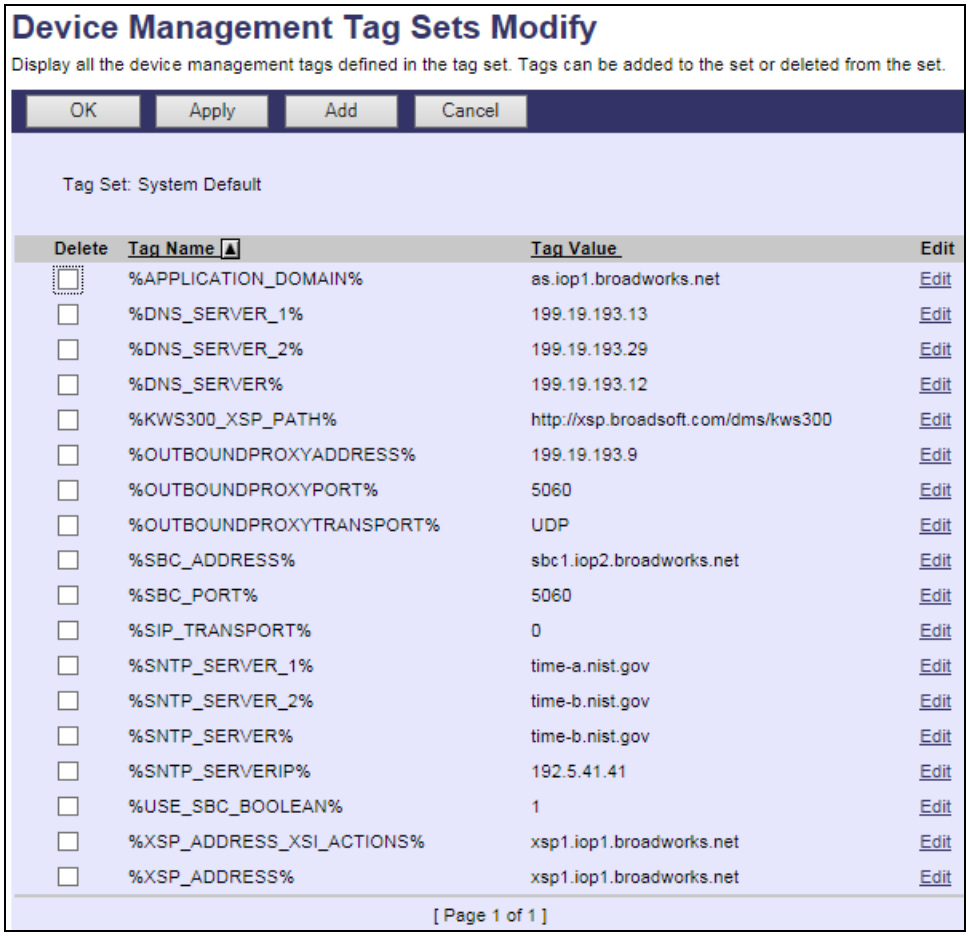
Example System Default Tag Settings



Device Management Tag Sets Modify

Display all the device management tags defined in the tag set. Tags can be added to the set or deleted from the set.

OK | Apply | Add | Cancel

Tag Set: System Default

Delete	Tag Name	Tag Value	Edit
☐	%APPLICATION_DOMAIN%	as.iop1.broadworks.net	Edit
☐	%DNS_SERVER_1%	199.19.193.13	Edit
☐	%DNS_SERVER_2%	199.19.193.29	Edit
☐	%DNS_SERVER%	199.19.193.12	Edit
☐	%KWS300_XSP_PATH%	http://xsp.broadsoft.com/dms/kws300	Edit
☐	%OUTBOUNDPROXYADDRESS%	199.19.193.9	Edit
☐	%OUTBOUNDPROXYPORT%	5060	Edit
☐	%OUTBOUNDPROXYTRANSPORT%	UDP	Edit
☐	%SBC_ADDRESS%	sbc1.iop2.broadworks.net	Edit
☐	%SBC_PORT%	5060	Edit
☐	%SIP_TRANSPORT%	0	Edit
☐	%SNTP_SERVER_1%	time-a.nist.gov	Edit
☐	%SNTP_SERVER_2%	time-b.nist.gov	Edit
☐	%SNTP_SERVER%	time-b.nist.gov	Edit
☐	%SNTP_SERVERIP%	192.5.41.41	Edit
☐	%USE_SBC_BOOLEAN%	1	Edit
☐	%XSP_ADDRESS_XSI_ACTIONS%	xsp1.iop1.broadworks.net	Edit
☐	%XSP_ADDRESS%	xsp1.iop1.broadworks.net	Edit

[Page 1 of 1]

Figure 17 System Default Tag Settings

5.2.1.2 Create Device Type Specific Tags

Browse to *System → Resources → Device Management Tag Sets* and click **Add** to add a new tag set. Configure the tag set name using the device name appended by Tags: *Yealink SIP-TxP Tags*. Add the device type-specific tags in the following table to the device tag set. If the tag set already exists, ensure the following tags are defined.

Tag Name	Valid Settings	Description
%TRANSPORT_TYPE%	0 1 2 3	Configures the network transport type for the device to communicate to the proxy. 0 = UDP 1 = TCP 2 = TLS 3 = DNS-NAPTR

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Tag Name	Valid Settings	Description
%FEATURE_SYNC%	0 1	Enable/Disable the feature key synchronization for the phone. 0 = Disabled 1 = Enable
%T20_FIRMWARE%	9.<x.x.x>.rom Example: 9.71.0.10.rom	T20P FIRMWARE VERSION
%T21_FIRMWARE%	34.<x.x.x>.rom Example: 34.71.0.60.rom	T21P FIRMWARE VERSION
%T19_FIRMWARE%	31.<x.x.x.>.rom Example: 31.71.0.15.rom	T19P FIRMWARE VERSION
%T22_FIRMWARE%	7.<x.x.x>.rom Example: 7.71.0.10.rom	T22P FIRMWARE VERSION
%T26_FIRMWARE%	6.<x.x.x>.rom Example: 6.71.0.10.rom	T26P FIRMWARE VERSION
%T28_FIRMWARE%	2.<x.x.x>.rom Example: 2.71.0.10.rom	T28P FIRMWARE VERSION
%TIMEZONENAME%	See Appendix B	Defines the time zone name
%CALL_WAITING_BINARY%	0 1	Enable or disabled the call waiting function. 0 = Disabled 1 = Enabled
%AUTO_ANSWER_BINARY%	0 1	Enable or disable the auto answer function of each line 0 = Disabled 1 = Enabled The X ranged from 1 to 6. It depends on the specific line numbers of the sip phone model. (Same as the related X parameter below).
%REJECT_ANONYMOUS_CALL_BINARY%	0 1	Enable or disable the reject anonymous incoming calls function of each line. 0 = Disabled 1 = Enabled
%TRANSPORT_TYPE%	0 1 2 3	Defines the SIP transport. 0 = UDP 1 = TCP 2 = TLS 3 = DNS NAPTR

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Tag Name	Valid Settings	Description
%XSIPASSWORD-1%	String	Defines the Xsi host password. Leave as blank for the tag set as a place hold. This tag should be customized in each device profile.
%FEATURE_BW_DIR%	0 1	Enable or disable the BroadWorks Directory function. 0 = Disabled 1 = Enabled **This tag is used for v71 or above.
%FEATURE_BW_CALL_LOG%	0 1	Enable or disable the phone to access the BSFT call log/phonebook directly when pressing the History/Directory soft keys. 0 = Disabled 1 = Enabled **This tag is used for v71 or above.
%FEATURE_BW_CALL_PARK%	0 1	Enable or disable the BroadWorks Call Park function. 0 = Disabled 1 = Enabled **This tag is used for v71 or above.
%DEVICE_ACCESS_PWD%	String	Defines the device management file access password. Leave as blank for the tag set as a place hold. This tag should be customized in each device profile.

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Example Device Type Specific Tag Settings

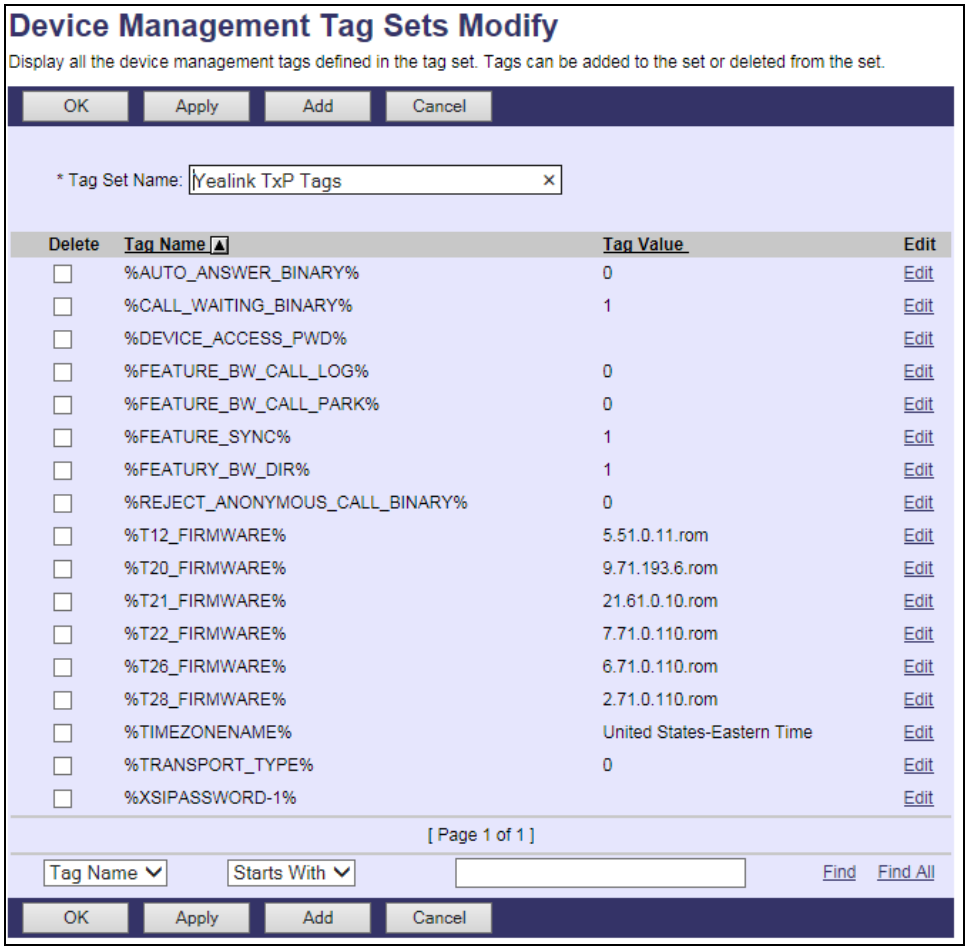

Figure 18 Device Type-Specific Tag Settings

5.2.2 Configure BroadWorks Device Profile Type

The device profile type is a system-level structure that defines how the device interfaces with BroadWorks. It also identifies the default configuration files and other files, such as firmware, which are required for the phone to operate correctly. The device profile type is created by the system administrator. Group administrators use the device profile type to create a device profile. The device profile is an instance of the device profile type that is associated with a physical device or IP phone.

There are two BroadWorks device profile configuration methods described: import and manual. The import method takes a DTAF as input and builds the BroadWorks device profile type(s) automatically. The manual method walks the administrator through the steps to manual add and configure the device profile type(s).

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The import method should be used if all of the prerequisites are met:

- The BroadWorks Release is 17.0 or later.
- The device profile type(s) being imported do not already exist on the system. (If either a previous import or manual configuration was done, the import fails.)
- There is a DTAF file available for import with a BroadWorks release level that is the same as or prior to the release being imported to. If the DTAF file is at a release level later than the release being imported to, the import can fail.

Otherwise, use the manual method.

5.2.2.1 Configuration Method 1: Import

This section identifies the steps necessary to make use of the Device Management import feature to configure BroadWorks to add the Yealink SIP-TxP as a Device Management-enabled device type.

The import method is available in BroadWorks Release 17.0 and later. For previous releases, use the manual configuration method described in the next section.

Download the Yealink SIP-TxP CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the DTAF file(s) from the CPE kit. These are the import files. Repeat the following steps for each model you want to import.

1) Log in to BroadWorks as an administrator.
2) Browse to *System* → *Resources* → *Identity/Device Profile Types* and select *Import*.
3) Click **Browse** to find the extracted DTAF file for the model and click **OK** to start the import.

   After the import finishes, complete the following post-import configuration.
4) Browse to *System* → *Resources* → *Identity/Device Profile Types*.
5) Perform a search to find the imported Yealink device profile type, Yealink SIP-TxP.
6) Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform or Xtended Services Platform cluster address.

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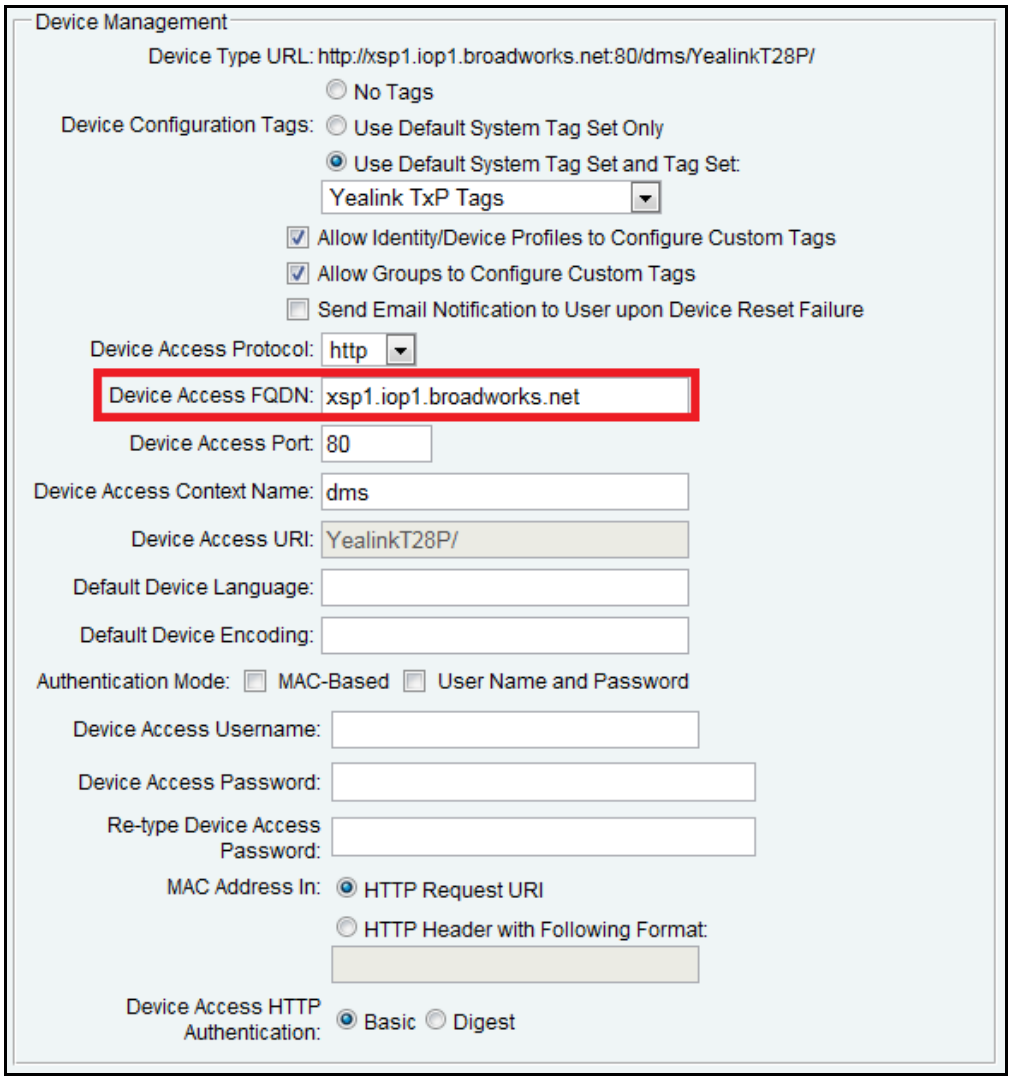
Device Management
Device Type URL: http://xsp1.iop1.broadworks.net:80/dms/YealinkT28P/
Device Configuration Tags:
No Tags
Use Default System Tag Set Only
Use Default System Tag Set and Tag Set:
Yealink TxP Tags
Allow Identity/Device Profiles to Configure Custom Tags
Allow Groups to Configure Custom Tags
Send Email Notification to User upon Device Reset Failure
Device Access Protocol: http
Device Access FQDN: xsp1.iop1.broadworks.net
Device Access Port: 80
Device Access Context Name: dms
Device Access URI: YealinkT28P/
Default Device Language:
Default Device Encoding:
Authentication Mode: MAC-Based User Name and Password
Device Access Username:
Device Access Password:
Re-type Device Access Password:
MAC Address In: HTTP Request URI
HTTP Header with Following Format:
Device Access HTTP Authentication: Basic Digest

Figure 19 Device Access FQDN

7) Click the **Files and Authentication** link and select the option to rebuild all the system files.

Firmware files must be obtained from Yealink. These files are not included in the import. Complete the steps in section *5.2.2.2.2.3 Static Files* to define the static firmware files and to upload the firmware.

NOTE: The non-firmware static files in section *5.2.2.2.2.3 Static Files* are included in the import.

After importing the DTAFs, restart the Application Server to load the *TimeZoneAlias* files.

Update the device profile type language setting according to instructions provided in section *5.2.2.2.2.5 Language Mapping*.

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5.2.2.2 Configuration Method 2: Manual

This section identifies the manual steps necessary to configure BroadWorks to add the Yealink SIP-TxP as a Device Management-enabled device type.

The manual method must be used for BroadWorks releases prior to Release 17.0. It is an optional method in Release 17.0 and later. To determine when to use the manual method, see section *5.2.2 Configure BroadWorks Device Profile Type*. The steps in this section can also be followed to update previously imported or configured device profile type(s) with new configuration files and firmware.

The steps in this section must be completed for the device profile type for each Yealink SIP-TxP model.

5.2.2.2.1 Modify Device Profile Type

This section identifies the BroadWorks device profile type settings relevant to Device Management for the Yealink SIP-TxP.

Browse to *System → Resources → Identity/Device Profile Types* and perform a search to find the Yealink device profile type(s) created in section *3.1 BroadWorks Device Profile Type Configuration* or add the device profile type for each model using the settings from section *3.1 BroadWorks Device Profile Type Configuration* if they do not exist.

The *Standard Options* and *Advanced Options* should already be configured as specified in section *3.1 BroadWorks Device Profile Type Configuration*. If there are differences, perform an update to match the settings in section *3.1 BroadWorks Device Profile Type Configuration*.

The following subsections identify the required settings specific to Device Management.

5.2.2.2.1.1 Configure Device Configuration Options

If Device Management has been enabled previously for the device profile type(s), proceed to the next section.

Device Configuration is enabled differently depending on the deployed BroadWorks release.

For BroadWorks Release 18.0 and later, configure as described in the following table.

Parameter	Value	Description
Device Configuration Options	Device Management	Use BroadWorks Device Management

The following figure shows Device Management enablement for BroadWorks Release 18.0 and later.

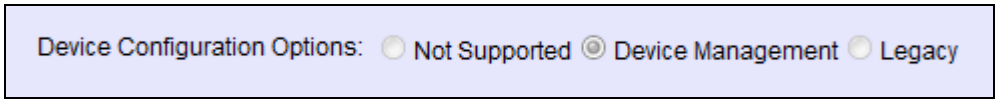

Figure 20 Enable Device Management (Release 18.0 and Later)

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For BroadWorks releases prior to Release 18.0, configure as described in the following table.

NOTE: These settings serve only to enable Device Management and are otherwise not meaningful in this context.

Parameter	Value	Description
Auto Configuration Type	2 Config File	Not meaningful other than it must be selected.
CPE System File Name	not_used	This parameter must not be blank, so set it to “not_used”.
Device File Format	not_used	This parameter must not be blank, so set it to “not_used”.

The following figure shows Device Management enablement for BroadWorks release prior to Release 18.0.

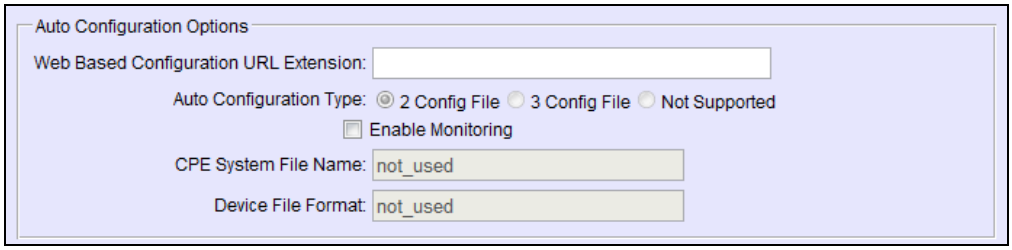

Figure 21 Enable Device Management (pre-Release 18.0)

5.2.2.2.1.2 Configure Device Management Options

Modify the device profile type *Device Management Options* as directed in the following table. These are common settings that apply to all devices enabled for Device Management.

If Device Management has been enabled previously for the device profile type(s), ensure the existing settings match the settings described in this section.

Parameters not identified in the following table can usually be left at the default values.

Parameter	Value	Description
Device Configuration Tags	Use Default System Tag Set and Tag Set. Select the device tag set created in section *5.2.1.2 Create Device Type Specific Tags*.	
Allow Identity/Device Profiles to Configure Custom Tags	checked	Optional
Allow Groups to Configure Custom Tags	checked	Optional
Device Access Protocol	http	

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Parameter	Value	Description
Device Access FQDN	<BroadWorks-XSP-Cluster-Address> Example: xsp.iop1.broadworks.net	Set to the Xtended Services Platform cluster FQDN if using an Xtended Services Platform farm. Otherwise, set to the individual Xtended Services Platform FQDN or IP address.
Device Access Port	<BroadWorks-XSP-Port> Example: 80	This should be set to “80”.
Device Access Context Name	dms	This does not need to be defined. BroadWorks defaults to the system-defined value.
Device Access URI	<device model name> Example: YealinkT28P	This defines the directory the Xtended Services Platform uses to access the configuration files.

Example Device Management Options Settings

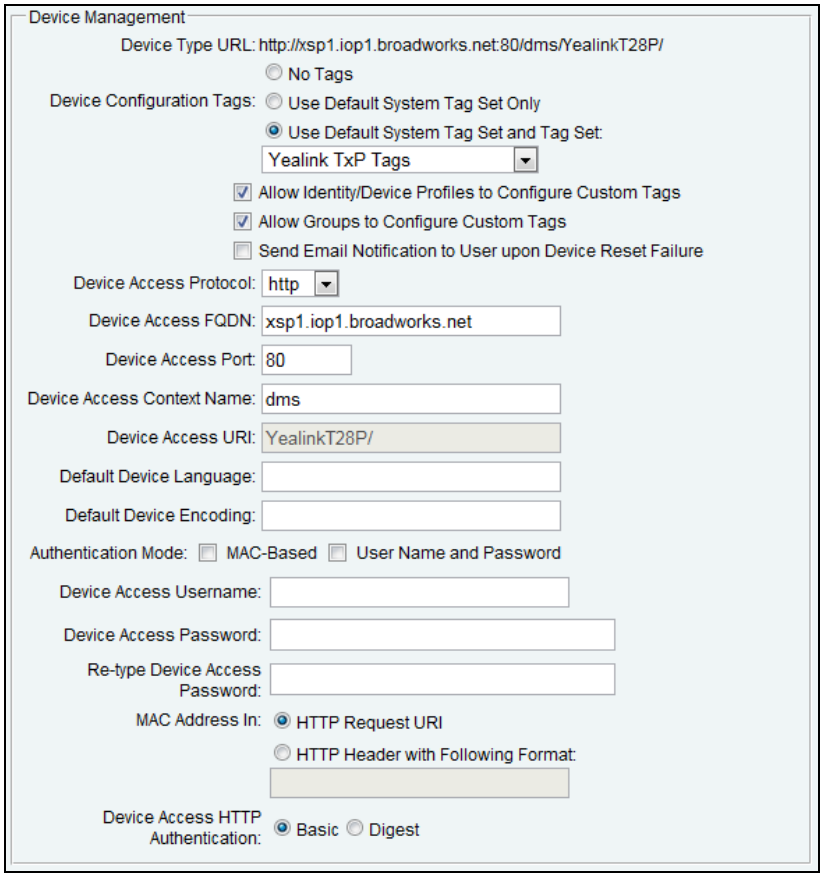
Device Management
Device Type URL: http://xsp1.iop1.broadworks.net:80/dms/YealinkT28P/
Device Configuration Tags:
No Tags
Use Default System Tag Set Only
Use Default System Tag Set and Tag Set:
Yealink TxP Tags
Allow Identity/Device Profiles to Configure Custom Tags
Allow Groups to Configure Custom Tags
Send Email Notification to User upon Device Reset Failure
Device Access Protocol: http
Device Access FQDN: xsp1.iop1.broadworks.net
Device Access Port: 80
Device Access Context Name: dms
Device Access URI: YealinkT28P/
Default Device Language:
Default Device Encoding:
Authentication Mode: MAC-Based User Name and Password
Device Access Username:
Device Access Password:
Re-type Device Access Password:
MAC Address In: HTTP Request URI
HTTP Header with Following Format:
Device Access HTTP Authentication: Basic Digest

Figure 22 Device Management Options Settings

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5.2.2.2.2 Define Device Profile Type Files

This section describes the BroadWorks Device Management configuration necessary to identify the configuration files and other files that the Yealink TxP downloads.

Configuration templates, firmware, and other files the Yealink TxP uses must be uploaded to BroadWorks. Download the Yealink TxP CPE kit from BroadSoft Xchange at broadsoft.com/xchange. Extract the configuration files from the *Configuration Files* folder of CPE kit. Obtain the firmware files directly from Yealink.

The following table identifies the Yealink configuration files distributed with the CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
		System-level, Device-specific, Static, Time Zone Alias	
Examples:			
BWMACADDRESS.cfg	*%BWMACADDRESS%-TxP.cfg.template*	Device-specific	This file contains device specific parameters that the phone needs to load.
y0000000000xx.cfg T19: xx=31 T20: xx=07 T21: xx=34 T22: xx=05 T26: xx=04 T28: xx=00	*y0000000000xx.cfg* T19: xx=31 T20: xx=07 T21: xx=34 T22: xx=05 T26: xx=04 T28: xx=00	System-level	This file contains system level parameters that the phone needs to load.
Ring.wav	*Ring.wav*	Static	Ringtone WAV format file.
lang+English.txt	*lang+English.txt*	Static	Default language file.
contactData1.xml *contact.xml*	*contactData1.xml* *contact.xml*	Static	This file contains the contact information in XML format. TxP: contactData1.xml From the V71 version, this parameter is unified as follows: TxP: contact.xml
DialPlan.xml	*DialPlan.xml*	Static	Specifies the dialing rules.
AutoDST.xml	*AutoDST.xml*	Static	Rules set at the beginning and end of Day Light Savings Time.
TimeZoneAliasLabels_Yealink+<model>.properties	*TimeZoneAliasLabels_Yealink-<model>.properties*	Time Zone Alias	The Time zone Alias file is a BroadWorks Device Management file used to map time zone identifiers between BroadWorks and Yealink phones. A Time zone Alias file is required for each model.
DialNow.xml	*DialNow.xml*	Static	This data file specifies the dial now rules for the phone.

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File Name	CPE Kit Template File Name	File Type	Description
Dialing.xml	*Dialing.xml*	Static	This data file specifies the soft keys available on the phone in the call failed calling state.
CallFailed.xml	*CallFailed.xml*	Static	This data file specifies the soft keys available on the phone in the *call failed* calling state.
CallIn.xml	*CallIn.xml*	Static	This data file specifies the soft keys available on the phone in the *call alerting* calling state.
Connecting.xml	*Connecting.xml*	Static	This data file specifies the soft keys available on the phone in the *call connecting* state.
Ringback.xml	*Ringback.xml*	Static	This data file specifies the soft keys available on the phone in the ring back state.
Talking.xml	*Talking.xml*	Static	This data file specifies the soft keys available on the phone in each of the in-session calling state.
WebItemsLevel.cfg	*WebItemsLevel.cfg*	Static	This data file defines the permission of the configuration items on the web user interface and phone user interface.
CallData.xml	*CallData.xml*	Static	This file is used to store the history.

The following table identifies other files that the Yealink TxP downloads from the server or uploads to the server. These files are not provided in the CPE kit and must be obtained from Yealink.

File Name	File Type	Description
x.x.x.x.rom	Static	Device firmware file.

Browse to *System → Resources → Identity/Device Profile Types → Files and Authentication* to add the files as described in the following subsections.

5.2.2.2.2.1 System Files

This section identifies the system-level files used by Yealink and provides instructions for defining the files and uploading for Device Management.

The TxP downloads a system file, named as follows:

- *T19P: y000000000031.cfg*
- *T20P: y000000000007.cfg*
- *T21P: y000000000034.cfg*
- *T22P: y000000000005.cfg*
- *T26P: y000000000004.cfg*
- *T28P: y000000000000.cfg*

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Add a BroadWorks device profile type file to the Yealink TxP device profile for the system file using the settings described in the following table.

Parameters not identified in the following table can usually be left at the default values.

Parameter	Value	Description/Notes
Device Access File Format	<system-file-name> Example: y000000000000.cfg	This is the file name the phone uses to request the file.
Repository File Format	<system-file-name> Example: y000000000000-%BWTIMESTAMP%.cfg	This is the file name as stored on the Device Management repository.
File Category	Dynamic Per-Type	Only one system file is generated for the profile type.
File Customization	Administrator	This identifies who can customize the system file template.
Assign File	Custom	
Authentication Mode	User Name and Password	This system file is authenticated with the user name and password.
Device Access HTTP Authentication	Digest	

After defining the system file type, upload the corresponding system file template downloaded from BroadSoft Xchange. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

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Example System File Settings

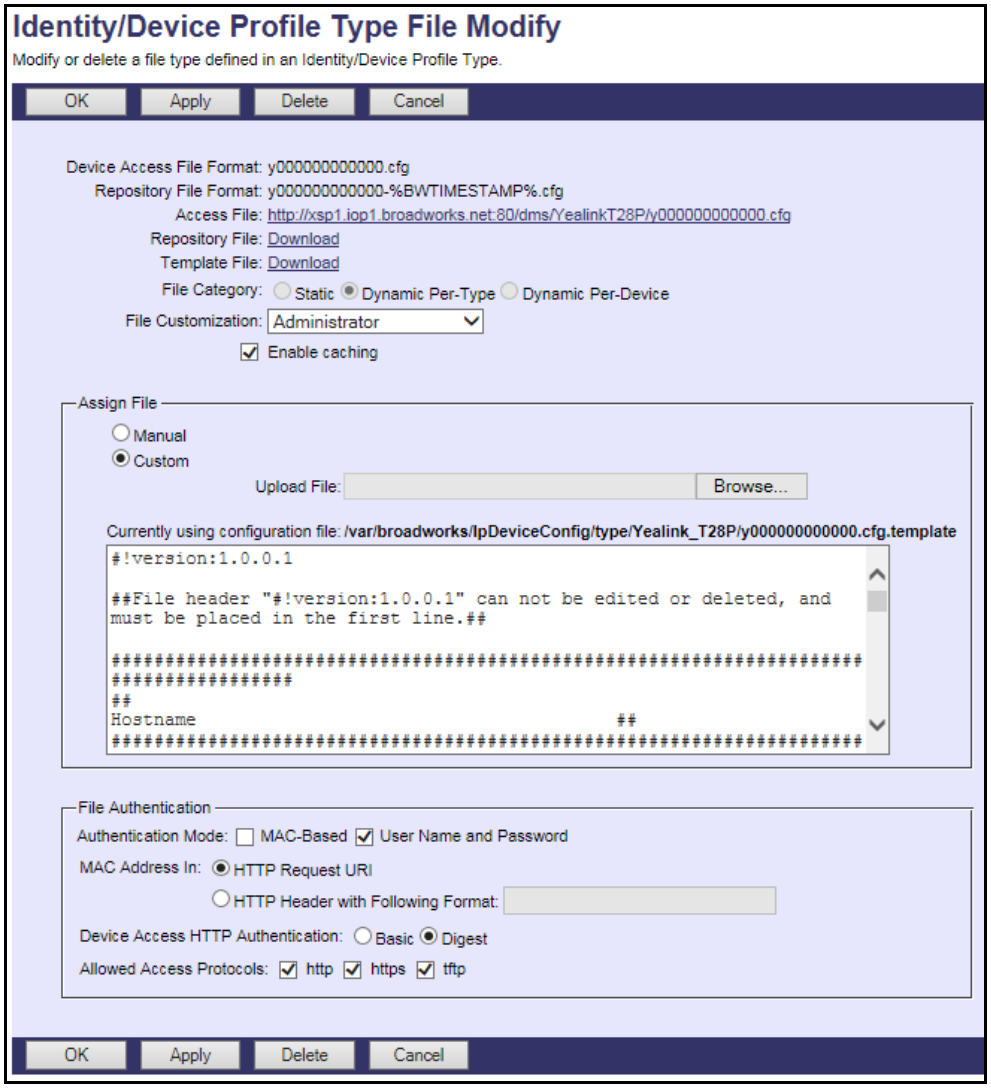

Figure 23 y0000000000.cfg File

5.2.2.2.2.2 Device-Specific Files

This section identifies the device-specific files used by Yealink and provides instructions for defining and uploading the files for Device Management.

Each TxP phone downloads a device-specific file based on the MAC address using the following file name format:

<MAC-address>.cfg

Add a BroadWorks device profile type file to the Yealink TxP device profile for the device specific file using the settings described in the following table.

Parameters not identified in the following table can usually be left at the default values.

Parameter	Value	Description

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Parameter	Value	Description
Device Access File Format	<device-specific-file-format> Example: %BWMACADDRESS%.cfg	This is the file name format the phone uses to request the file.
Repository File Format	%BWFQDEVICEID%.cfg	This is the file name format as stored in the Device Management repository.
File Category	Dynamic Per-Device	This file is unique per device.
File Customization	Administrator and User	This identifies who can customize this file template.
Enable Caching	Not set	Caching should not be enabled for device-specific files.
Assign File	Custom	
Authentication Mode	User Name and Password	The phone-specific file is authenticated with the user name and password.
Device Access HTTP Authentication	Digest	

After defining the device-specific file type, upload the corresponding device-specific file template downloaded from BroadSoft Xchange. Use the **Browse** button on the file definition screen.

Select the appropriate device-specific file to upload based on the model as follows:

- TxP models: *%BWMACADDRESS%-TxP.cfg*

Be sure to click **Apply** after uploading the file.

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Example Device-Specific File Settings

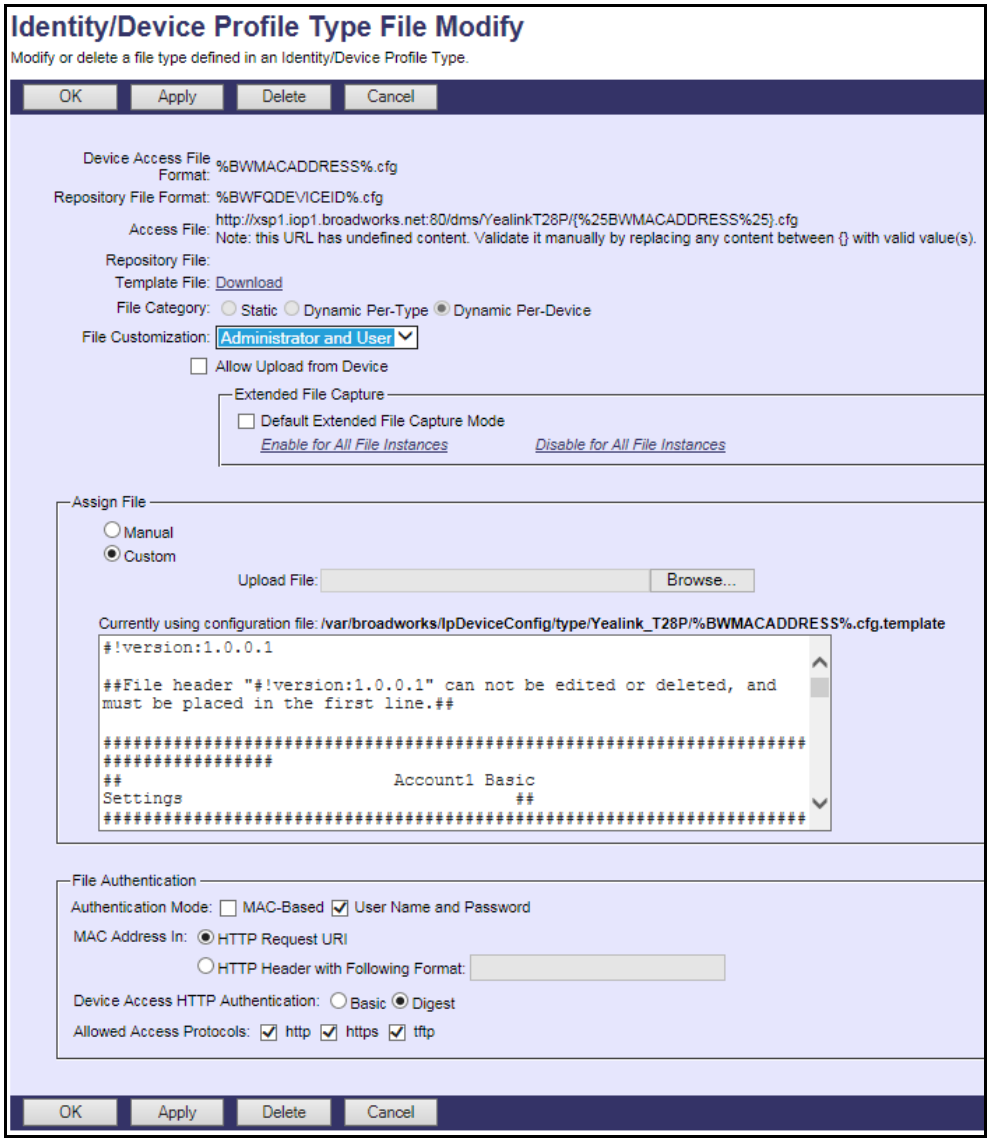
Identity/Device Profile Type File Modify
Modify or delete a file type defined in an Identity/Device Profile Type.
OK
Apply
Delete
Cancel
Device Access File Format: %BWMACADDRESS%.cfg
Repository File Format: %BWFQDEVICEID%.cfg
Access File: http://xsp1.iop1.broadworks.net:80/dms/YealinkT28P/{%25BWMACADDRESS%25}.cfg
Note: this URL has undefined content. Validate it manually by replacing any content between {} with valid value(s).
Repository File:
Template File: Download
File Category: Static Dynamic Per-Type Dynamic Per-Device
File Customization: Administrator and User
Allow Upload from Device
Extended File Capture
Default Extended File Capture Mode
Enable for All File Instances
Disable for All File Instances
Assign File
Manual
Custom
Upload File:
Browse...
Currently using configuration file: /var/broadworks/IpDeviceConfig/type/Yealink_T28P/%BWMACADDRESS%.cfg.template
#!version:1.0.0.1
##File header "#!version:1.0.0.1" can not be edited or deleted, and must be placed in the first line.##
Account1 Basic Settings
File Authentication
Authentication Mode: MAC-Based User Name and Password
MAC Address In: HTTP Request URI
HTTP Header with Following Format:
Device Access HTTP Authentication: Basic Digest
Allowed Access Protocols: http https tftp
OK
Apply
Delete
Cancel

Figure 24 %MACADDRESS%.cfg File

5.2.2.2.2.3 Static Files

Static files are files such as firmware and media files that are not configurable and/or do not make use of the dynamic BroadWorks Device Management tags.

The Yealink TxP requires the following static files:

- *<firmware-version>.rom*
- *Ring.wav*
- *lang+English.txt* (or other default language file)
- *contactData1.xml*
- *AutoDST.xml*

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- *CallData.xml*
- *DialPlan.xml*
- *DialNow.xml*
- *Dialing.xml*
- *CallFailed.xml*
- *CallIn.xml*
- *Connecting.xml*
- *Ringback.xml*
- *Talking.xml*
- *WebItemsLevel.cfg*

Add a BroadWorks device profile type file to the Yealink TxP device profile for each of the static files using the settings described in the following table.

Parameters not identified in the following table can usually be left at the default values.

Parameter	Value	Description
Device Access File Format	<file-name> Examples: *Ring.wav* *Talking.xml*	This is the file name the phone uses to request the file.
Repository File Format	<file-name> Examples: *Ring.wav* *Talking.xml*	This is the file name as stored in the Device Management repository. Use the same name as the actual file name.
File Category	Static	This is a static file. There are no dynamic tags in the file.
File Customization	Disallow	This file must not be modified.
Enable Caching	Selected	Caching is recommended for static files.
Assign File	Custom	
Authentication Mode	Not set	The static files are not authenticated. Do not select either of these options.

After defining the static file types, upload the corresponding static files. Firmware must be obtained from Yealink. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

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Example Static File Settings

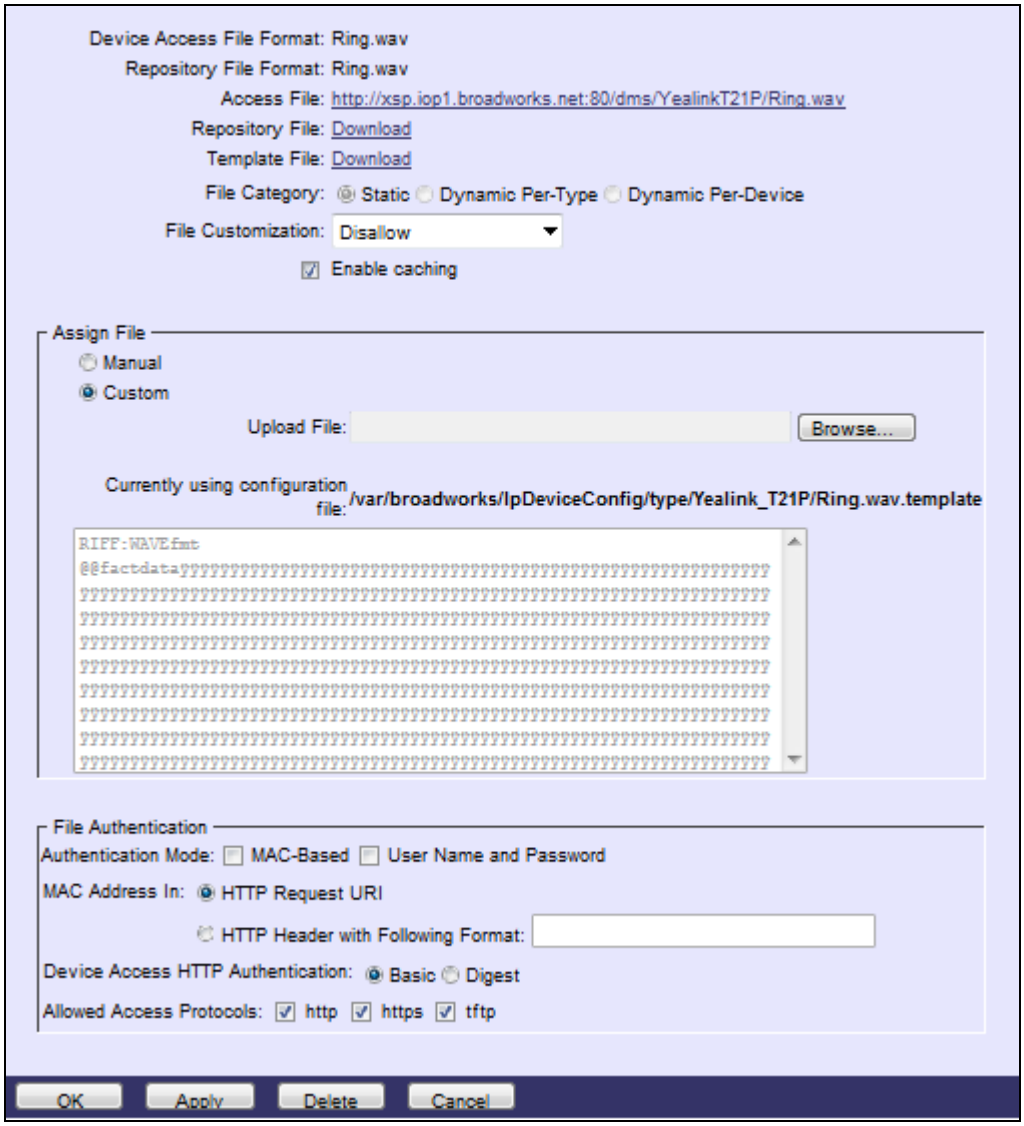

Figure 25 Static File Setting

5.2.2.2.2.4 Time Zone Alias File

To properly map the BroadWorks configured user time zone to the Yealink TxP phone setting, a mapping file must be created on the BroadWorks system. This file maps the BroadWorks user time zone settings to the phone's time zone settings. For more information about time zone mapping for the device profile type, see the *BroadWorks Device Management Configuration Guide* [2].

This time zone mapping file must be added to the */usr/local/broadworks/bw_base/conf/dms* directory on the Application Server using the following file name format: TimeZoneAliasLabels_<Device_Type_Name>.properties

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For example, if the device type name is *Yealink T28P,* the time zone mapping file name must be *TimeZoneAliasLabels_Yealink+T28P.properties*. (A space in the device name must be converted to a "+" in the file name.) A separate TimeZoneAlias file must be provided for each device profile type, corresponding to each Yealink model.

The file must contain the mapping of BroadWorks time zones values to Yealink TxP time zone values. The following is an example of the file contents:

```
US_ALASKA=-9
US_HAWAII=-10
CANADA_PACIFIC_TIME=-8
US_PACIFIC_TIME=-8
US_ARIZONA=-7
CANADA_MOUNTAIN_TIME=-7
US_MOUNTAIN_TIME=-7
CANADA_CENTRAL_TIME=-6
US_CENTRAL_TIME=-6
CANADA_EASTERN_TIME=-5
US_INDIANA=-5
US_EASTERN_TIME=-5
CANADA_ALTANTIC_TIME=-4
CANADA_NEWFOUNDLAND=-3.5
```

This file should contain all the time zones supported by the service provider's BroadWorks system. Restart the Application Server to load this file.

The CPE kit contains the time zone properties files defined for the continental U.S. and Canadian time zones. For other time zone settings, see the *Yealink TxP SIP Phone User Manual* [1]. When using the DTAF import, the *TimeZoneAlias* files are automatically copied onto the system.

Restart the Application Server for the *TimeZoneAlias* files to be picked up by the system.

5.2.2.2.2.5 Language Mapping

To enable Device Management control of the phone language, the languages defined on the BroadWorks Application Server must be mapped to the Yealink language files. To perform the mapping, select the Yealink TxP device profile type and then select the *Languages* link. The defined BroadWorks languages are listed in a table. If languages other than English do not appear, they have not been defined. The supported languages and required mapping are as follows:

BroadWorks Language	Yealink Language Mapping
English	lang+English.txt
Spain_Spanish	lang-Spanish.txt
Polish	lang-Polish.txt
Turkish	lang-Turkish.txt
French	lang-French.txt
German	lang-German.txt
Italian	lang-Italian.txt
Portuguese	lang-Portuguese.txt

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Example language mapping*:*

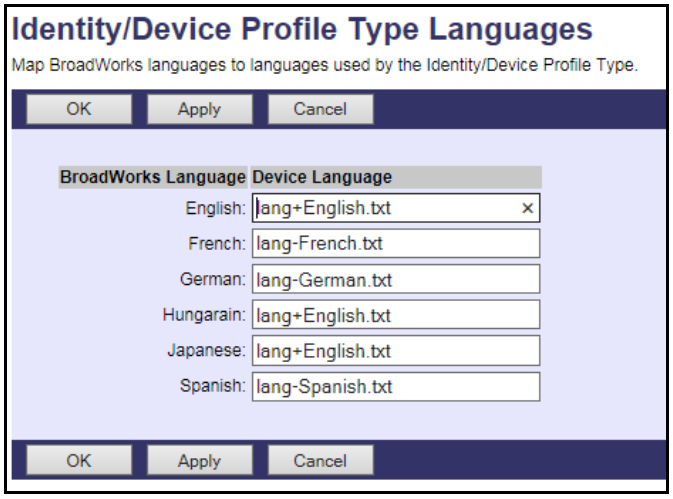

Figure 26 Language Mapping

The language applied to an individual phone is determined by the language defined for the user on the *BroadWorks User's Profile* page.

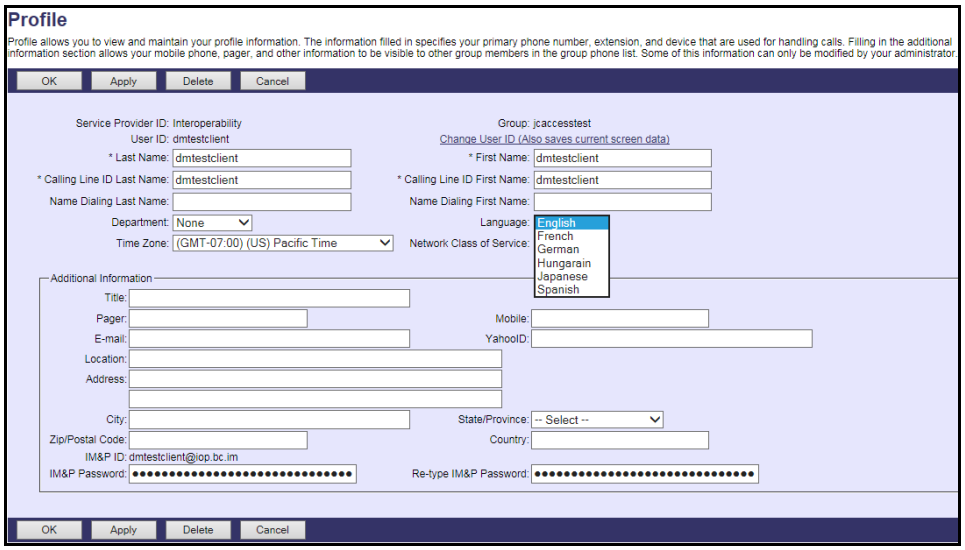

Figure 27 BroadWorks User Language Definition

5.2.3 Create Device Profile Instance

The previous sections defined the device profile type such that the system is ready to mass deploy device profiles. A device profile is an instance of the device profile type and defines the BroadWorks interface to a Yealink phone deployed at a user's desk.

This section describes how to create a BroadWorks device profile instance for an individual Yealink SIP-TxP phone. Device profile instances are usually created at the BroadWorks Group level and assigned to users.

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When you create the device profile, you must define the authentication data. The authentication data is used by Device Management to challenge a request from a phone to download a configuration file. The device must send credentials that match the credentials stored in the device profile.

Browse to the BroadWorks *<group>* → *Resources* → *Identity/Device Profiles* page and select *Add* to add a new Yealink SIP-TxP device profile. Define the device profile instance using the settings described in the following table.

Parameters not identified in the following table can usually be left at the default values.

Parameter	Value	Description
Identity/Device Profile Name	<device-profile-name> Example: Yealink T28 - 01	The device profile name is a unique identifier for the device profile instance.
Identity/Device Profile Type	<yealink-txp-device-profile-type> Example: Yealink T28P	From the drop-down list, select the Yealink device profile type created in the previous section.
Authentication	Use Custom Credentials	Use the unique login name and password for each phone.
Device Access User Name	<phone-login-name> Example: lsmith	User name used to log in from the phone. The phone login user naming convention must be determined by the service provider.
Device Access Password	<phone-login-password> Example: 654321	Password used to log in from the phone.

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Example Identity/Device Profile Add Settings

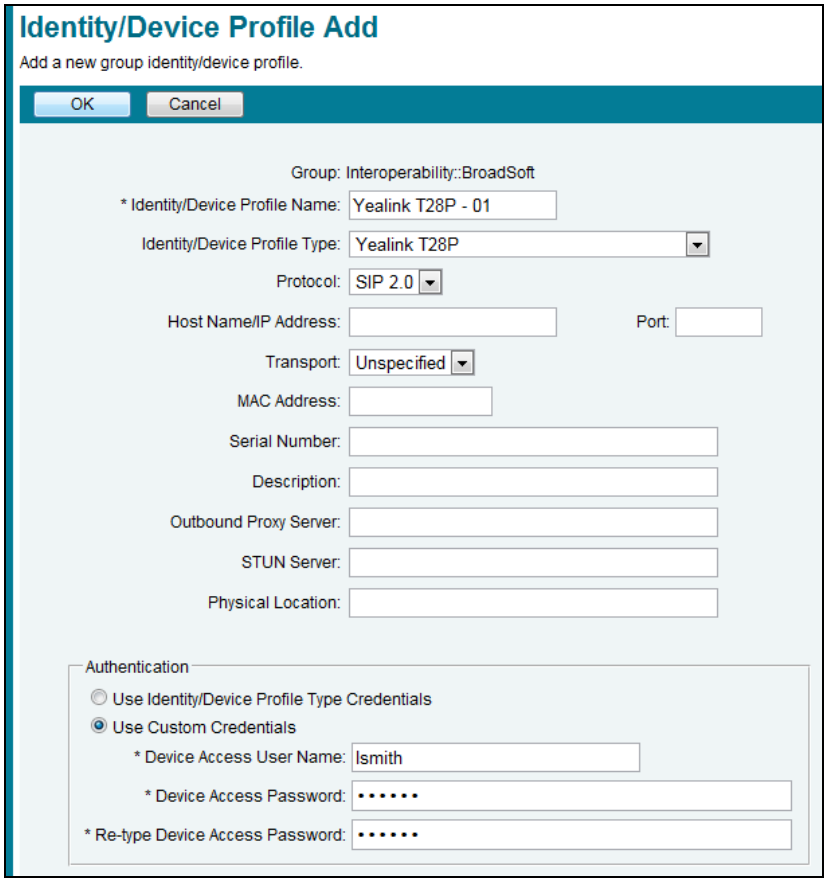

Figure 28 Device Profile Instance

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For the Xtended Services Interface feature to be authenticated, it is necessary to override the Xtended Services Interface password for each of the lines at the device profile instance level. To override custom tags at the device profile instance level, click on the *Custom Tags* tab.

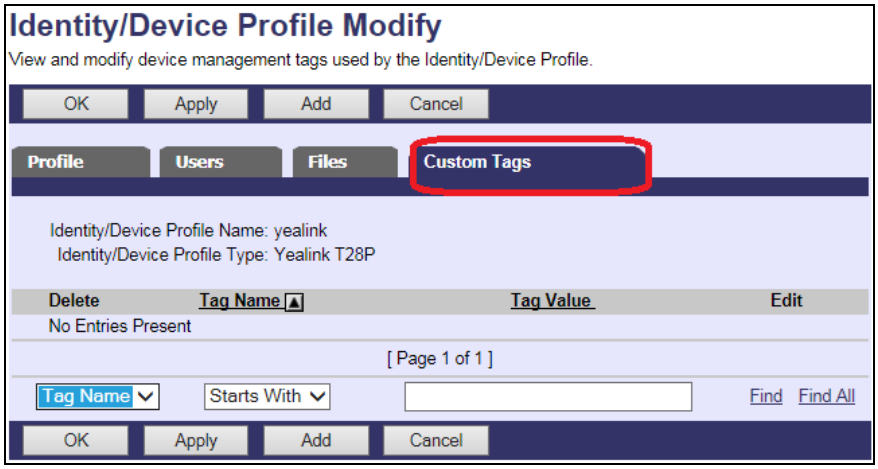

Figure 29 Device Profile Instance Custom Tags Over-ride

Then click **Add** to add custom tags with the following parameters:

Parameter	Value	Description/Notes
Tag Name	XSIPASSWORD-<line number> Example: XSIPPASSWORD-1	This tag provides the Xsi password of the user for the line, which is assigned to the phone. Line number is an integer corresponding to the phone line in assignment.
Tag Value	The user's Xsi password. Example: 123456	
Tag Name	%DEVICE_ACCESS_PWD%	This tag provides the DM password to the phone.
Tag Value	The user's DM password. Example: 123456	

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Example device profile custom tag setting

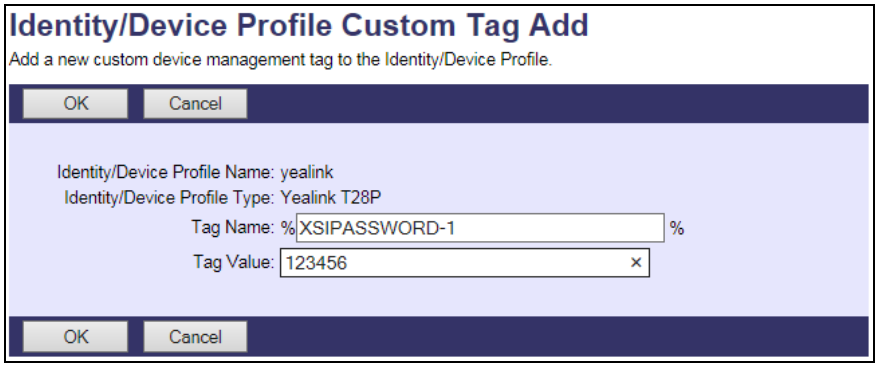

Figure 30 Device Profile Instance Custom Tags Add

Repeat the tag adding process for any other device level tags to be altered for device profile configuration file customization.

5.2.4 Configure BroadWorks User

Configure the user with the desired BroadWorks configuration and services. Any services that require a specific configuration on the device are managed via Device Management and are defined in the device configuration files, provided that the template files are created with the correct Device Management tags.

The device profile created in the previous section should be assigned to the BroadWorks user. Assigning the device profile to the user automatically causes the Device Management feature to generate the device configuration files for this user's device.

To assign the device profile to the user, browse to the BroadWorks *<user>* → *Addresses* page and set the parameters as described in the following table.

It is expected that parameters not identified in the following table are already set or are self-explanatory.

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Parameter	Value	Description
Identity/Device Profile Name	<device-profile-name> Example: yealink	From the drop-down list, select the device profile instance created in the previous section.
Line/Port	<SIP register address-of-record> Example: 8881001099@as.iop1.broadworks.net	Supply the desired SIP register address-of-record.

Example User Addresses Settings

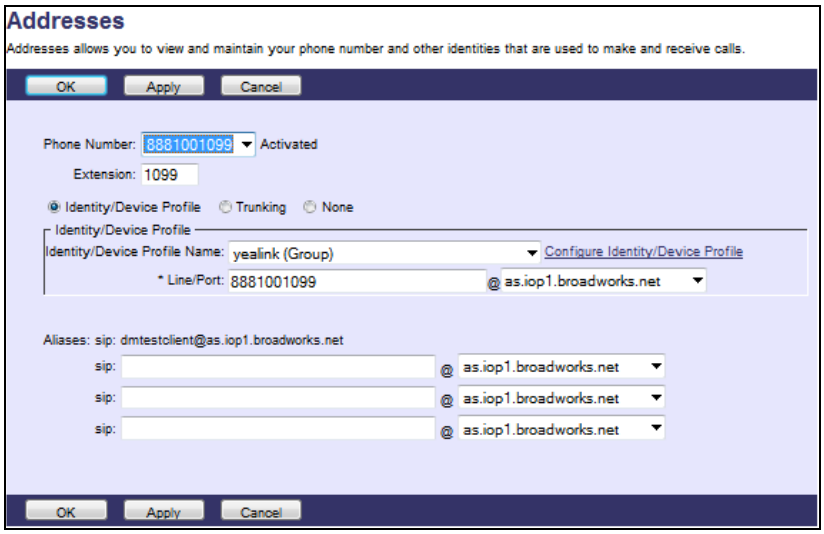

Figure 31 Assign Device Profile to User

NOTE: Consider the provisioned Xtended Services Interface credentials at the device profile level when defining new users or assigning existing device profiles to other users.

5.2.5 Configure Edge Device

In many deployments, an edge device is deployed on the enterprise edge. Configure the edge device SIP server setting with the service provider's session border controller IP address or FQDN.

To integrate the edge device with Device Management, the SBC address tag (%SBC_ADDRESS%) defined in section *5.2.1.1 Create System Default Tags* must be overridden at the group level with the LAN address of the edge device. At the *Group* → *Utilities* → *Configure Device* page, select the Yealink device profile (example: Yealink T28P). Perform the following steps.

1) Click on the *Custom Tags* tab.
2) Click **Add**.
3) Add the SBC tag.
4) For the tag, enter "SBC_ADDRESS".

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5) For the value, enter the IP address (that is, the edge device LAN IP address).

6) To save the tag data, click **OK**.

This Tag/Value is applied to all Yealink model phones in the group using the modified *Device Profile Type*.

Repeat for each Yealink model provisioned in the group.

5.2.6 Configure Yealink TxP

This section describes the steps necessary to configure the Yealink TxP to integrate with BroadWorks Device Management.

The phone must be configured with the Device Management URL and authentication user name and password. This configuration can be accomplished as described in the sections:

- *5.2.6.1 Manual Provisioning*
- *5.2.6.2 No Touch Provisioning via BroadWorks Device Management*

5.2.6.1 Manual Provisioning

Log in to the web user interface for the TxP phone (https://<phone-ip-address>). Go to the *Upgrade* web page and set the following:

- Check New Config – Power On
- URL – Device Management server (Xtended Services Platform) device address URL

  Example: http(s)://xsp1.broadworks.net:80/dms/Yealink_T28P/
- Account – BroadWorks Device Access User Name

  Example: lsmith
- Password – BroadWorks Device Access Password

  Example: 123456

Restart the phone to force the phone to download the Device Management configuration files and firmware.

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Example Login (Default User Name/Password is admin/admin)

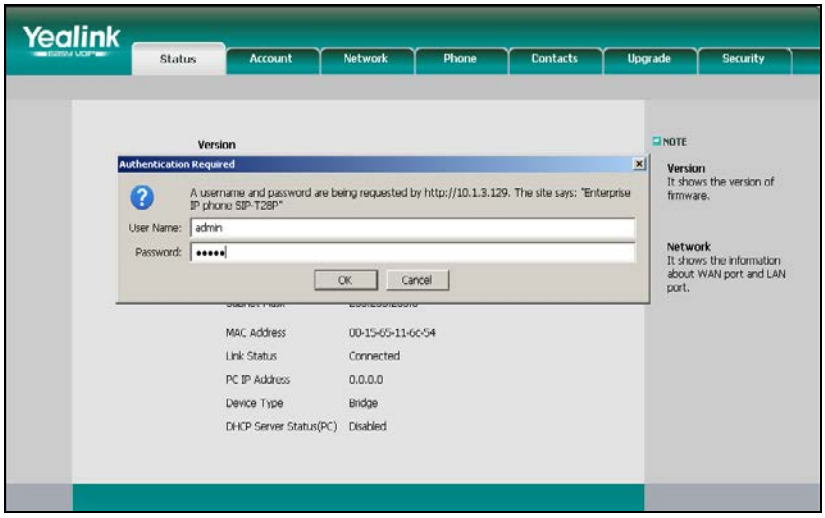

Figure 32 Login Screen

Example Upgrade screen

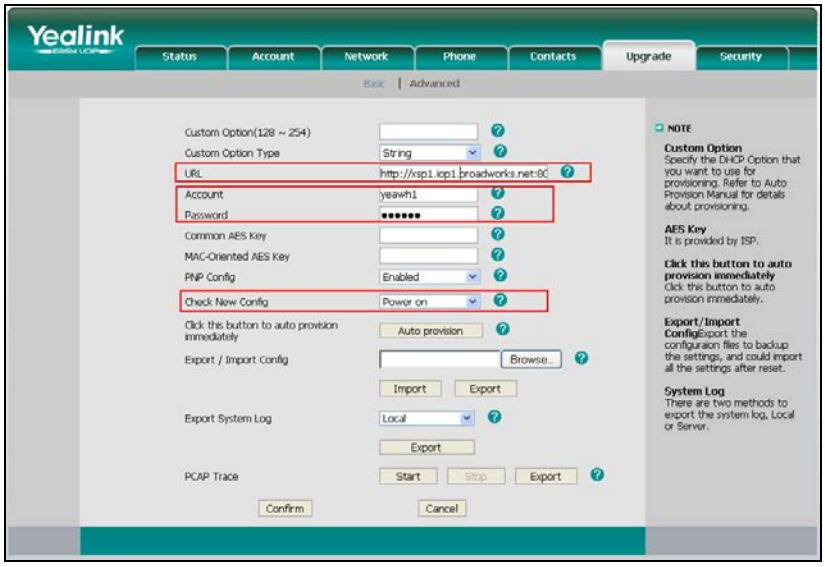

Figure 33 Upgrade Screen

5.2.6.2 No Touch Provisioning via BroadWorks Device Management

The No Touch Provisioning method via BroadWorks Device Management uses DHCP and Device Management default configuration files. This enables configuration of the phone out-of-the-box without pre-provisioning before sending it to a customer's site.

No Touch Provisioning is done using the DHCP options provided by the end customer's DHCP server. The steps are as follows:

1) The phones are shipped to the end customer without pre-provisioning.

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2) The end customer's DHCP server is configured with *Option 66* with the default Device Management URL.
3) The phone is plugged in and it receives the default Device Management URL from the DHCP server.
4) The phone queries for the default product file from Device Management.
5) The phone receives the default device file from Device Management and provisions the phone with the physical Device Management URL for the specific device model.
6) The phone resynchronizes with Device Management and prompts Zero Touch Update.
7) The end user or administrator enters the device management credentials into the Auto Provision username and password fields.
8) The phone resynchronizes with Device Management and downloads the files associated with the credentials supplied via the above step.

Device Management must be configured to facilitate the No Touch Provisioning method. Configuration can be performed using the Device Management import function or done manually. Each method is described in the following subsections.

5.2.6.2.1 Configuration Method 1: Import

This section identifies the steps necessary to make use of the Device Management import feature to configure BroadWorks to add the Device Management Defaults device type for No Touch Provisioning.

The import method is available in BroadWorks Release 17.0 and later. For previous releases, use the manual configuration method described in the next section.

Download the Yealink TxP Series CPE kit from BroadSoft Xchange at www.broadsoft.com/xchange. Extract the *DeviceManagementDefaults.DTAF.zip* file from the CPE kit. This is the import file.

Log in to BroadWorks as an administrator. Browse to *System* → *Resources* → *Identity/Device Profile Types* and select *Import*. Select *Browse* to find the extracted DTAF file and click **OK** to start the import.

After the import finishes, the following post-import configuration steps must be completed.

Browse to *System* → *Resources* → *Identity/Device Profile Types* and perform a search to find the imported *DeviceManagementDefaults* device profile type. Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform or Xtended Services Platform cluster address.

Example:

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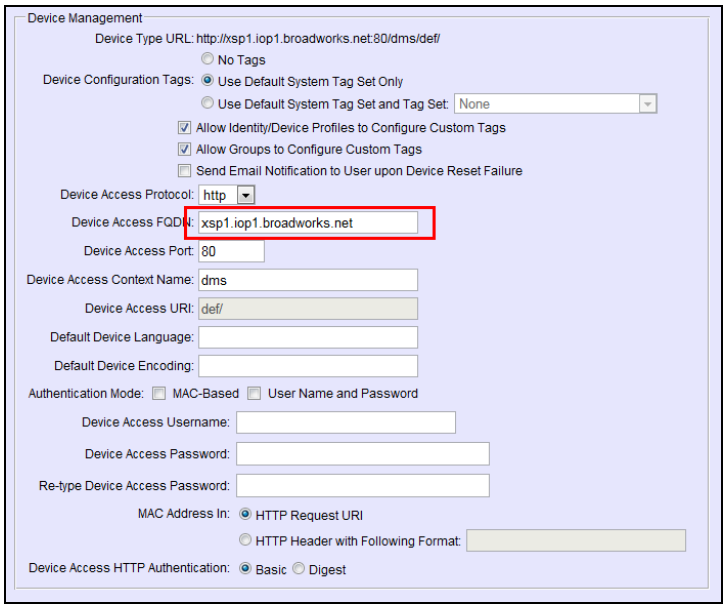

Figure 34 Device Access FQDN

Next, using the *Files and Authentication* link, select the option to rebuild all the system files.

5.2.6.2.2 Configuration Method 2: Manual

This section identifies the manual steps necessary configure BroadWorks to add the Device Management Defaults device type for No Touch Provisioning

The manual method must be used for BroadWorks releases prior to Release 17.0. It is an optional method in Release 17.0 and later. The steps in this section can also be followed to update previously imported or configured device profile type(s) with new configuration files and firmware.

5.2.6.2.2.1 Create Default Device Profile Type

A Device Management default device profile type must be created. This device profile type can be configured to serve default provisioning files to Polycom endpoints, as well as other vendor devices.

Create a default device profile type as shown in the following figure. Only the device management settings are important in this context since the profile type is used only to serve default provisioning files. The standard and advanced settings do not matter.

5.2.6.2.2.1.1 Configure Standard Options

The device profile type name and standard options do not matter, but an example is provided for reference. All settings can be left with their default values.

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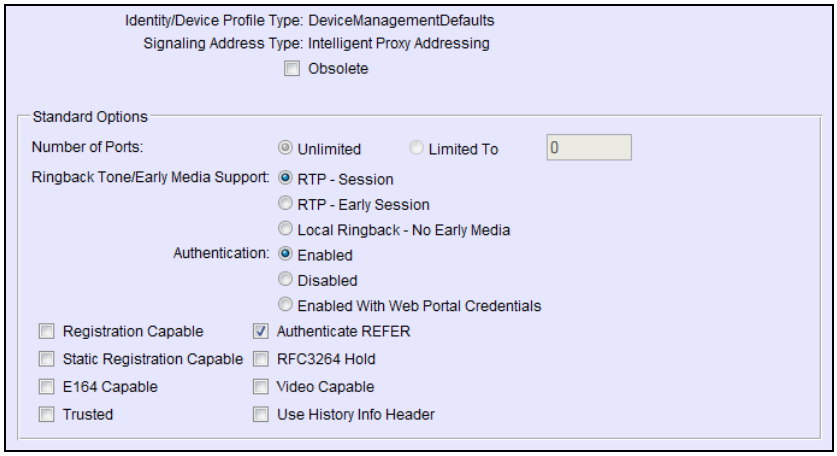

Figure 35 Default Device Profile Type

5.2.6.2.2.1.2 Configure Advanced Options

The advanced options do not matter, but an example is provided for reference. All settings can be left with their default values.

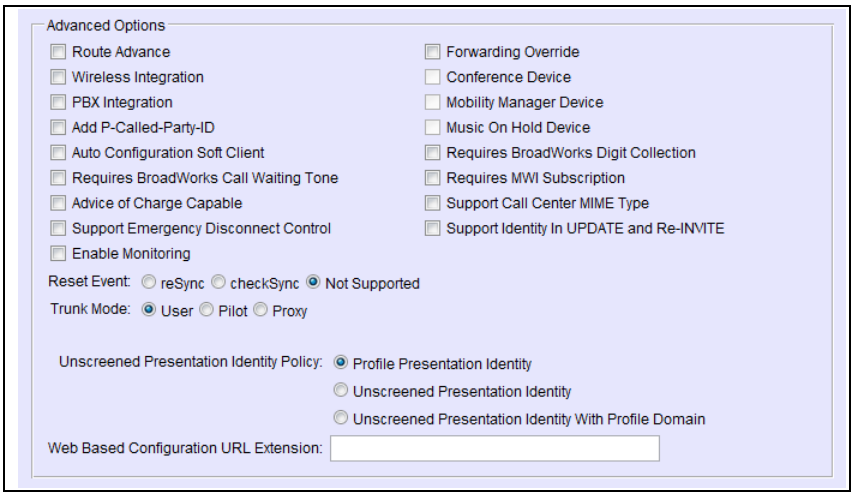

Figure 36 Configure Advanced Options

5.2.6.2.2.1.3 Configure Device Management Options

Configure the device profile type *Device Management Options* as directed in the following table. These are common settings, which apply to all devices enabled for Device Management.

Parameters not identified in the following table can usually be left with their default values.

Parameter	Value	Description
Device Configuration Tags	Use Default System Tag Set Only	

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Parameter	Value	Description
Allow Identity/Device Profiles to Configure Custom Tags	Checked	Optional
Allow Groups to Configure Custom Tags	Checked	Optional
Device Access Protocol	http	
Device Access FQDN	<BroadWorks-XSP-Cluster-Address> Example: xsp.iop1.broadworks.net	If using an Xtended Services Platform farm, set this to the Xtended Services Platform cluster FQDN. Otherwise, set it to the individual Xtended Services Platform FQDN or IP address.
Device Access Port	<BroadWorks-XSP-Port> Example: 80	This should be set to “80”.
Device Access Context Name	dms	This does not need to be defined. BroadWorks defaults to the system-defined value.
Device Access URI	def	This defines the directory the Xtended Services Platform uses to access the default configuration files.

Example *Device Management Options* settings:

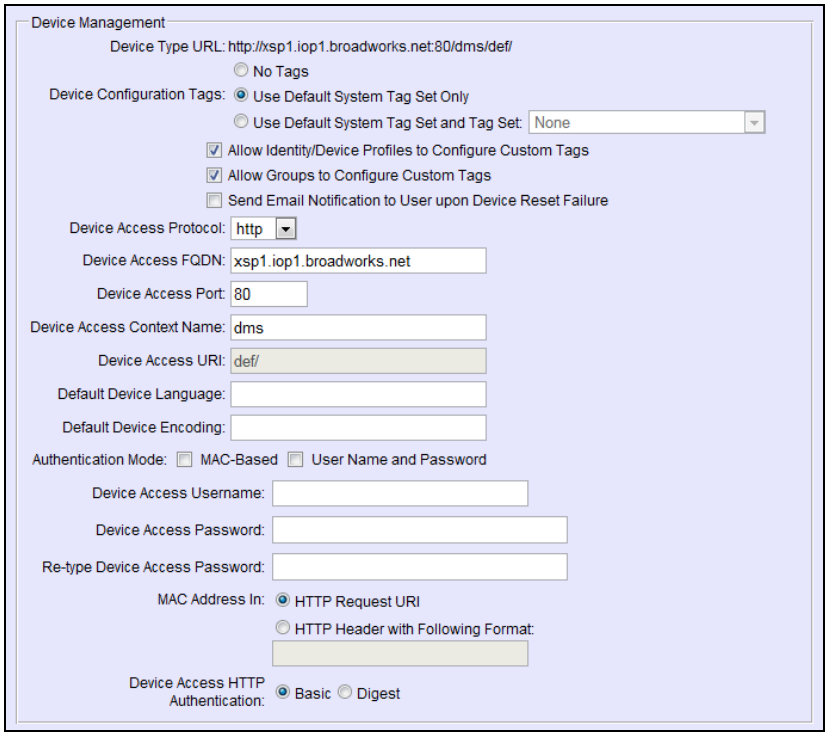

Figure 37 Device Management Options Settings

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5.2.6.2.2.2 Define Device Profile Type Files

This section describes the BroadWorks Device Management configuration necessary to identify the configuration files used to enable the *DeviceManagementDefaults* device type for Yealink TxP devices.

Depending on the specific device model, Yealink TxP devices request y0000000000xx.cfg from Device Management at device startup. The y0000000000xx.cfg files provisioned in the *DeviceManagementDefaults* device type will provide the actual Device Management file access path to the respective Yealink TxP phone model.

Add a y0000000000xx.cfg BroadWorks device profile type file to the *DeviceManagementDefaults* device profile for each Yealink TxP Device using the settings described in the following table.

Parameters not identified in the following table can usually be left with their default values.

Parameter	Value	Description
Device Access File Format	y0000000000xx.cfg Example: y000000000000.cfg for T28P	This is the file name, which the phone uses to request the file.
Repository File Format	y0000000000xx-%BWTIMESTAMP%.cfg Example: y000000000000-%BWTIMESTAMP%.cfg for T28P	This is the file name, (as stored in the Device Management repository).
File Category	Dynamic Per-Type	This file is a static file. There are no dynamic tags in the file.
File Customization	Disallow	This identifies who can customize this file template.
Enable Caching	Selected	Caching is recommended for this file.
Assign File	Custom	
Authentication Mode	None	The static files are not authenticated so do not select either of the options.

After defining the file, upload the y0000000000xx-*default.cfg* file template downloaded from BroadSoft Xchange. Be sure to upload the y0000000000xx-*default.cfg* files and not the y0000000000xx.*cfg* files. Use the **Browse** button on the *File Definition* screen. Be sure to click **Apply** after uploading the file.

Example y0000000000xx-*default.cfg* file settings:

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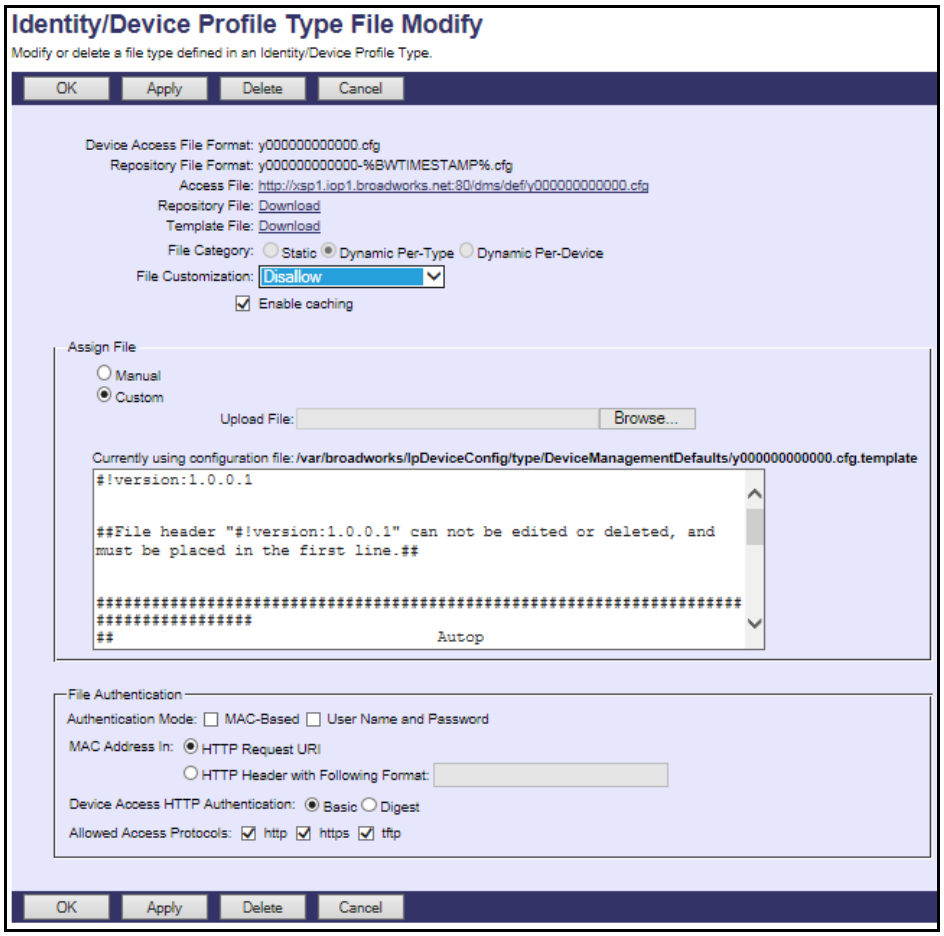

Figure 38 y0000000000xx-default.cfg File

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5.3 Upgrading from Previous CPE Kits

The configuration sections above are primarily structured around importing or manually configuring the Yealink device profile types for the first time. Many of the steps are unnecessary when upgrading to a new firmware release or CPE kit version.

5.3.1 General Recommendations for Upgrades

Upgrades can be resource intensive if not managed properly. Recommendations for a managed upgrade include:

- Perform the upgrade during a maintenance window.
- Keep the previous firmware on the system in case a downgrade is required. Older versions can be deleted.
- Perform the upgrade at the group level rather than the system-wide level. To do so:
  1) Upload firmware at the system level.
  2) Select the group to upgrade.
  3) Select *Utilities → Device Configuration*.
  4) Search for and select the Yealink model to upgrade.
  5) Select Files. Upload the new or updated configuration files at the group level. (Refer to relevant upgrade section to identify new or modified configuration files.)
  6) On the *Files* page, select *Rebuild the files*. This rebuilds all the configuration files associated with the selected Yealink device profile type in this group
  7) On the *Files* page, select *Reset the phones*. This causes the phones to restart and pick up new firmware and configuration files.
  8) Repeat steps 2 through 7 for each Yealink model in the group to upgrade.
- After all groups have been upgraded, complete the following steps to update the system device profile types and reset the group device profile types to default values.
  1) Browse to the *System → Resources → Identity/Device Profile Types* page. Search for and select the Yealink model device type. Upload the new or updated configuration files at the group level. (Refer to relevant upgrade section to identify new or modified configuration files.) Repeat for each Yealink model.
  2) For each group, browse to the *Utilities → Device Configuration* page. Search for and select the upgraded Yealink model. Select *Files* and set each updated file back to *Default*. Repeat for each Yealink model.

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5.3.2 Upgrade from x.70.x.x to x.71.x.x

The firmware files can be uploaded at any time, but loading configuration files should be done during a maintenance window. Perform the following steps to upgrade the Yealink Device Type to support version x.71.x.x:

1) Obtain x.71.x.x firmware from Yealink.
2) Upload the new Yealink firmware version x.70.x.x for each Yealink phone model as described in section *5.2.2.2.2.3 Static Files.*
3) Import DTAF files for any new or not previously imported Yealink models in use by service provider customers.

   The remaining steps are done during the maintenance window. The following configuration template files have been modified in version x.71.x.x and need to be uploaded for each Yealink model device profile type:

   – <MAC Address>.cfg
   – y0000000000xx.cfg

4) Firmware version tags described in section *5.2.1.2 Create Device Type Specific Tags* need to be altered to reflect the new version.
5) New custom device tags need to be added per instructions in section *5.2.1.2 Create Device Type Specific Tags*.
6) Xsi credentials need to be defined at each device profile as described in section 5.2.3 Create Device Profile Instance.
7) Perform the upgrade by group, following the steps in section *5.3.1 General Recommendations for Upgrades*. Alternatively, omit the group steps and perform the upgrade at the system level.

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Appendix A: Sample TxP Configuration Files

NOTE: The following samples are examples and should be used as a reference only. DO NOT CUT AND PASTE THESE EXAMPLES TO GENERATE YOUR CONFIGURATION FILES. Use the configuration files obtained from Yealink with the specific release to generate your configuration files.

System Default File: y0000000000xx.cfg

NOTE: This is an example file and should be used for reference only.

```
#!version:1.0.0.1

##File header "#!version:1.0.0.1" can not be edited or deleted, and must be
placed in the first line.##

##############################################################################
#########
##                                    Hostname
##
##############################################################################
#########
network.dhcp_host_name =

##############################################################################
#########
##                                    PPPoE
##
##############################################################################
#########
network.pppoe.user =
network.pppoe.password =

##############################################################################
#########
##                                   PC Port
##
##############################################################################
#########
##It configures the PC (LAN) port type.0-Router,1-Bridge,The default value is
1.
##It takes effect after a reboot.
network.bridge_mode =
network.pc_port.ip =
network.pc_port.mask =
network.dhcp.start_ip =
network.dhcp.end_ip =

##############################################################################
#########
##                                   Network Advanced
##
##############################################################################
#########
##It enables or disables the PC port.0-Disabled,1-Auto Negotiation.
##The default value is 1.It takes effect after a reboot.
network.pc_port.enable =
##It configures the transmission mode and speed of the Internet (WAN) port.
##0-Auto negotiate
##1-Full duplex 10Mbps
##2-Full duplex 100Mbps
```


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```
##3-Half duplex 10Mbps
##4-Half duplex 100Mbps
##5-Full duplex 1000Mbps (only applicable to SIP-T42G and SIP-T46G IP phones)
##The default value is 0.It takes effect after a reboot.
network.internet_port.speed_duplex =
##It configures the transmission mode and speed of the PC (LAN) port.
##0-Auto negotiate
##1-Full duplex 10Mbps
##2-Full duplex 100Mbps
##3-Half duplex 10Mbps
##4-Half duplex 100Mbps
##5-Full duplex 1000Mbps (only applicable to SIP-T42G and SIP-T46G IP phones)
##The default value is 0.It takes effect after a reboot.
network.pc_port.speed_duplex =
##It enables or disables the phone to act as a DHCP server when the PC (LAN)
port is configured as Router.
##0-Disabled   1-Enabled
##The default value is 1.It takes effect after a reboot.
network.pc_port.dhcp_server =
##It enables or disables the phone to use manually configured static IPv4 DNS
when Internet (WAN) port type for IPv4 is configured as DHCP.
##0-Disabled (use the IPv4 DNS obtained by DHCP)   1-Enabled
##The default value is 0.It takes effect after a reboot.
network.static_dns_enable =
network.ipv6_static_dns_enable =

##############################################################################
#########
##                                    VLAN
##
##############################################################################
#########
network.vlan.internet_port_enable =
network.vlan.internet_port_vid =
network.vlan.internet_port_priority =
network.vlan.pc_port_enable =
network.vlan.pc_port_vid =
network.vlan.pc_port_priority =
network.vlan.dhcp_enable =
network.vlan.dhcp_option =

##############################################################################
#########
##                                    WEB Port
##
##############################################################################
#########
##It configures the HTTP port for web server access.
##The default value is 80.It takes effect after a reboot.
network.port.http =
##It configures the HTTPS port for web server access.
##The default value is 443.It takes effect after a reboot.
network.port.https =
wui.https_enable =
wui.http_enable =

##############################################################################
#########
##                                    QoS
##
##############################################################################
#########
##It configures the voice QoS.
##The default value is 46.It takes effect after a reboot.Integer from 0 to 63
network.qos.rtptos =
##It configures the SIP QoS.
##The default value is 26.It takes effect after a reboot.Integer from 0 to 63
network.qos.signaltos =

##############################################################################
```


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```
#########
##                                  802.1X
##
#################################################################################
#########
network.802_1x.mode =
network.802_1x.identity =
network.802_1x.md5_password =
network.802_1x.root_cert_url =
network.802_1x.client_cert_url =

#################################################################################
#########
##                                  OpenVPN
##
#################################################################################
#########
network.vpn_enable =
openvpn.url =

#################################################################################
#########
##                                  LLDP
##
#################################################################################
#########
network.lldp.enable =
network.lldp.packet_interval =

#################################################################################
#########
##                                  SNMP
##
#################################################################################
#########
#Enable or disable the SNMP feature; 0-Disabled (default), 1-Enabled;
#Require reboot;
network.snmp.enable =
network.snmp.port =

#Configure the IP address(es) of the trusted SNMP server,multiple IP addresses
must be separated by a space.
#Require reboot;
network.snmp.trust_ip =

#################################################################################
#########
##                                  Span to PC
##
#################################################################################
#########
network.span_to_pc_port =

#################################################################################
#########
##                                  RTP Port
##
#################################################################################
#########
##It configures the maximum local RTP port.
##The default value is 11800.It takes effect after a reboot.Integer from 1024
to 65535
network.port.max_rtpport =
##It configures the maximum local RTP port.
##The default value is 11780.It takes effect after a reboot.Integer from 1024
to 65535
network.port.min_rtpport =

#################################################################################
#########
```


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```
##                                  Syslog
##
#################################################################################
#########
syslog.mode =
##It configures the IP address or domain name of the syslog server when
exporting log to the syslog server.
##It takes effect only if the parameter ¡°syslog.mode¡± is configured as
Server.
##The default value is blank.It takes effect after a reboot.
syslog.server =
##It configures the detail level of syslog information to be exported.0 means
nothing and 6 means all.
##The default value is 3.It takes effect after a reboot.Integer from 0 to 6
syslog.log_level =

#################################################################################
#########
##                                  TR069
##
#################################################################################
#########
managementserver.enable =
managementserver.username =
managementserver.password =
managementserver.url =
managementserver.connection_request_username =
managementserver.connection_request_password =
managementserver.periodic_inform_enable =
managementserver.periodic_inform_interval =

#################################################################################
#########
##                                  Autop Mode
##
#################################################################################
#########
#Configure the auto provision mode;
#0-Disabled, 1-Power on(default), 4-Repeatedly, 5-Weekly, 6-Power on +
Repeatedly, 7-Power on + Weekly;
auto_provision.mode =

#################################################################################
#########
##                                  Autop PNP
##
#################################################################################
#########
auto_provision.pnp_enable =

#################################################################################
#########
##                                  Autop DHCP
##
#################################################################################
#########
auto_provision.dhcp_option.enable =
auto_provision.dhcp_option.list_user_options =

#################################################################################
#########
##                                  Autop Repeat
##
#################################################################################
#########
auto_provision.repeat.enable =
auto_provision.repeat.minutes =

#################################################################################
#########
```


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```
##                                   Autop Weekly
##
##############################################################################
#########
#Configure the day of week for the phone to check new configuration files. The
default vaule is 0123456.
#0-Sunday,1-Monday,2-Tuesday,3-Wednesday,4-Thursday,5-Friday,6-Saturday;
#It is only applicable to "Weekly" and "Power on + Weekly" modes.
#If the desired week is Monday, Tuesday and Wednesday, the value format is
012.
auto_provision.schedule.dayofweek =

#Configure the start time of the day for the phone to check new configuration
files. The default value is 00:00.
#It is only applicable to "Weekly" and "Power on + Weekly" modes.
#If the desired start time of the day is seven forty-five a.m., the value
format is 07:45.
auto_provision.schedule.time_from =

#Configure the end time of the day for the phone to check new configuration
files.  The default time is 00:00.
#It is only applicable to "Weekly" and "Power on + Weekly" modes.
#If the desired end time of the day is seven forty-five p.m., the value format
is 19:45.
auto_provision.schedule.time_to =

##############################################################################
#########
##                                   Autop URL
##
##############################################################################
#########
auto_provision.server.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%

##############################################################################
#########
##                                   Autop AES Key
##
##############################################################################
#########
##It configures the AES key for decrypting the Common CFG file. The valid
characters contain: 0 ~ 9, A ~ Z, a ~ z.
##The default value is blank.
auto_provision.aes_key_16.com =
##It configures the AES key for decrypting the MAC-Oriented CFG file. The
valid characters contain: 0 ~ 9, A ~ Z, a ~ z.
##The default value is blank.
auto_provision.aes_key_16.mac =
auto_provision.aes_key_in_file =
##It configures the access URL of the custom MAC-Oriented CFG file.
##The default value is blank.
custom_mac_cfg.url =
##It configures the value (vendor name of the device) of DHCP option 60.
##The default value is yealink.
auto_provision.dhcp_option.option60_value =

##############################################################################
#########
##                                   Autop Code
##
##############################################################################
#########
##It configures the name of the code for triggering auto provisioning.
##The default value is blank.It takes effect after a reboot.
autoprovision.1.name =
##It configures the code for triggering auto provisioning.
##Valid characters are digits, # and *.Example:autoprovision.1.code = *99The
default value is blank.
```


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```
##It takes effect after a reboot.
autoprovision.1.code =
##It configures the access URL of auto provisioning server.The default value
is blank.
##It takes effect after a reboot.
autoprovision.1.url =
##It configures the user name for authentication during auto provisioning.
##The default value is blank.It takes effect after a reboot.
autoprovision.1.user =
##It configures the password for authentication during auto provisioning.
##The default value is blank.It takes effect after a reboot.
autoprovision.1.password =
##It configures the AES key for decrypting the Common CFG file.
##The default value is blank.It takes effect after a reboot.
autoprovision.1.com_aes =
##It configures the AES key for decrypting the MAC-Oriented CFG file.
##The default value is blank.It takes effect after a reboot.
autoprovision.1.mac_aes =

###############################################################################
#########
##                                  Watch Dog
##
###############################################################################
#########
watch_dog.enable =

###############################################################################
#########
##                                  SIP Advanced
##
###############################################################################
#########
sip.use_23_as_pound =
sip.rfc2543_hold =
sip.use_out_bound_in_dialog =
sip.reg_surge_prevention =
sip.send_response_by_request =
sip.notify_reboot_enable =

###############################################################################
#########
##                                  Echo Cancellation
##
###############################################################################
#########
voice.vad =
voice.cng =
voice.echo_cancellation =

###############################################################################
#########
##                                  Jitter Buffer
##
###############################################################################
#########
voice.jib.adaptive =
voice.jib.min =
voice.jib.max =
voice.jib.normal =

###############################################################################
#########
##                                  Volume
##
###############################################################################
#########
voice.handfree.spk_vol =
voice.handfree.tone_vol =
voice.handset.spk_vol =
```


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```
voice.handset.tone_vol =
voice.headset.spk_vol =
voice.headset.tone_vol =
voice.ring_vol=
voice.group_spk_vol =

### Only T28P/T26P/T22P/T20P Models support the three parameters
voice.handfree_send =
voice.handset_send =
voice.headset_send =

##############################################################################
#########
##                                  Transfer
##
##############################################################################
#########
##It enables or disables the transferee party¡¯s phone to prompt a missed call
on the LCD screen before displaying
##the caller ID when performing a semi-attended transfer.0-Enabled,1-Disabled
##The default value is 1.
transfer.semi_attend_tran_enable =
##It enables or disables the phone to complete the blind transfer through on-
hook.0-Disabled,1-Enabled .
##The default value is 1.
transfer.blind_tran_on_hook_enable =
##It enables or disables the phone to transfer call to the two parties after a
local conference call hangs up.
##0-Disabled,1-Enabled.
##The default value is 0.
transfer.tran_others_after_conf_enable =
##It enables or disables the phone to complete the attended transfer through
on-hook.
##0-Disabled,1-Enabled.
##The default value is 1.
transfer.on_hook_trans_enable =
##It configures the DSS key behavior during an active call when user presses
the DSS
##key and the DSS key is configured as a speed dial, transfer or BLF/BLF list
key.
##0-New Call,1-Attended Transfer,2-Blind Transfer.
##The default value is 2.
transfer.dsskey_deal_type =

###Except T20P/T41P/T42G/T46G Models
##It enables or disables the phone to enter Transfer to menu during multiple
calls when pressing the transfer soft key or TRAN key.
##0-Disabled,1-Enabled.
##The default value is 1.
transfer.multi_call_trans_enable =

##############################################################################
#########
##                                  Auto Redial
##
##############################################################################
#########
auto_redial.enable =
auto_redial.interval =
auto_redial.times =

##############################################################################
#########
##                                  Zero Touch
##
##############################################################################
#########
zero_touch.enable = 1
zero_touch.wait_time = 10
```


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```
##############################################################################
#########
##                                  Push XML
##
##############################################################################
#########
push_xml.server =
push_xml.block_in_calling=
push_xml.sip_notify=

##############################################################################
#########
##                                  Dial Plan
##
##############################################################################
#########
dialplan.area_code.code =
dialplan.area_code.min_len =
dialplan.area_code.max_len =
dialplan.area_code.line_id =

### X ranges from 1 to 10
###dialplan.block_out.number.x =
###dialplan.block_out.line_id.x =

dialplan.block_out.number.1 =
dialplan.block_out.line_id.1 =

###X ranges from 1 to 100
###dialplan.dialnow.rule.X =
###dialplan.dialnow.line_id.X =

dialplan.dialnow.rule.1 =
dialplan.dialnow.line_id.1 =

###X ranges from 1 to 100
###dialplan.replace.prefix.X =
###dialplan.replace.replace.X =
###dialplan.replace.line_id.X =

dialplan.replace.prefix.1 =
dialplan.replace.replace.1 =
dialplan.replace.line_id.1 =

dialplan_dialnow.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%dialnow.xml
phone_setting.dialnow_delay =
dialplan_replace_rule.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%dialplan.xml

##############################################################################
#########
##                                  Remote Phonebook
##
##############################################################################
#########
###X ranges from 1 to 5
###remote_phonebook.data.X.url =
###remote_phonebook.data.X.name =

remote_phonebook.data.1.url =
remote_phonebook.data.1.name =

###Except T41P/T42G Models
remote_phonebook.display_name =

##It enables or disables the phone to perform a remote phone book search when
receiving an incoming call.
```


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```
##0-Disabled,1-Enabled.
##The default value is 0.
features.remote_phonebook.enable=
##It configures the interval (in seconds) for the phone to update the data of
the remote phone book from the remote phone book server.
##The default value is 21600.Integer from 3600 to 2592000.
features.remote_phonebook.flash_time =

##############################################################################
#########
##                                  LDAP
##
##############################################################################
#########
##It enables or disables LDAP feature.0-Disabled,1-Enabled.
##The default value is 0.
ldap.enable =

##It configures the criteria for searching the contact name attributes.
##The default value is blank.
ldap.name_filter =

##It configures the criteria for searching the contact number attributes.
##The default value is blank.
ldap.number_filter =

##It configures the IP address or domain name of the LDAP server.
##The default value is blank.
ldap.host =

##It configures the port of the LDAP server.
##The default value is 389.Integer from 1 to 65535.
ldap.port =
##It configures the LDAP search base which corresponds to the location of the
LDAP phonebook.
##Example:ldap.base = dc=yealink,dc=cn.
##The default value is blank.
ldap.base =
##It configures the user name for accessing the LDAP server.
##The default value is blank.
ldap.user =
##It configures the password for accessing the LDAP server.
##The default value is blank.
ldap.password =
##It configures the maximum of the search results returned by the LDAP server
to be displayed.
##The default value is 50.Integer from 1 to 32000.
ldap.max_hits =
##It configures the name attributes of each record to be returned by the LDAP
server.
##Multiple attributes are separated by spaces.Example:ldap.name_attr =sn cn.
##The default value is blank.
ldap.name_attr =
##It configures the number attributes of each record to be returned by the
LDAP server.
##Multiple attributes are separated by spaces.Example:ldap.numb_attr = Mobile
ipPhone.
##The default value is blank.
ldap.numb_attr =
##It configures the display name of the contact record displayed on the LCD
screen.
##The default value is blank.
ldap.display_name =
##It configures the LDAP version.
##The default value is 3.
ldap.version =
##It enables or disables the phone to perform an LDAP search when receiving an
incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
```


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```
ldap.call_in_lookup =
##It enables or disables the phone to sort the search results in alphabetical
order or numerical order.
##0-Disabled,1-Enabled.
##The default value is 0.
ldap.ldap_sort =

##############################################################################
#########
##                                  Features
##
##############################################################################
#########
features.normal_refuse_code =
features.auto_answer_delay =
features.allow_mute =
features.group_listen_in_talking_enable = 0
features.call_completion_enable =
features.call_num_filter =
features.direct_ip_call_enable =
features.power_led_on =
features.relog_offtime =
features.ringer_device.is_use_headset =
features.factory_pwd_enable = 1
features.export_cfg_erase_pwd =

##############################################################################
#########
##                                  Features Forward
##
##############################################################################
#########
###Except T19P Model
features.fwd_mode =

features.fwd_diversion_enable =

##############################################################################
#########
##                                  Features DND
##
##############################################################################
#########
###Except T19P Model
features.dnd_mode =

features.dnd.enable =
features.dnd.on_code =
features.dnd.off_code =
features.dnd_refuse_code =
features.dnd.emergency_enable =
features.dnd.emergency_authorized_number =

##############################################################################
#########
##                                  Features BLF
##
##############################################################################
#########
##It configures BLF LED mode and provides four kinds of definition for the
BLF/BLF list key LED status.
##For more information, refer to BLF LED Mode on page 218.
##The default value is 0.
features.blf_led_mode = 1
##It enables or disables the phone to deal with the Version header in the BLF
NOTIFY message sent by the server.
##0-Disabled,1-Enabled.
##The default value is 0.It takes effect after a reboot.
features.blf_list_version =
features.blf_and_callpark_idle_led_enable = 0
```


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```
##############################################################################
#########
##                                  Features Intercom
##
##############################################################################
#########
features.intercom.allow  =
features.intercom.mute  =
features.intercom.tone  =
features.intercom.barge  =

##############################################################################
#########
##                                  Features Hotline
##
##############################################################################
#########
##It configures the hotline number.
##The default value is blank.
features.hotline_number =

##It configures the delay time (in seconds) for the phone to dial out the
hotline number automatically.
##The default value of delay time is 4.Integer from 0 to 10
features.hotline_delay =

##############################################################################
#########
##                                  Features DTMF
##
##############################################################################
#########
features.dtmf.hide =

###Except T20P Model
features.dtmf.hide_delay =

features.dtmf.repetition =
features.dtmf.transfer =
features.dtmf.replace_tran =

##############################################################################
#########
##                                  Features Audio Settings
##
##############################################################################
#########
features.headset_prior =

###Except T19P/T21P Models
features.headset_training =
features.alert_info_tone =
features.busy_tone_delay =
features.send_pound_key =
features.key_as_send =
features.send_key_tone =
features.key_tone =
features.play_hold_tone.enable =
features.play_hold_tone.delay =
features.redial_tone =
features.partition_tone =

##############################################################################
#########
##                                  Features Action URI
##
##############################################################################
#########
features.action_uri_limit_ip =
```


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```
##############################################################################
#########
##                                  Features Prefix
##
##############################################################################
#########
features.password_dial.enable =
features.password_dial.prefix =
features.password_dial.length =

##############################################################################
#########
##                                  Features History
##
##############################################################################
#########
features.save_call_history =

##############################################################################
#########
##                                  Ringtone
##
##############################################################################
#########
ringtone.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%Ring.wav
ringtone.delete =

##############################################################################
#########
##                                  Phone Settings
##
##############################################################################
#########
phone_setting.inter_digit_time =
phone_setting.ring_type =

phone_setting.ring_for_tranfailed =
phone_setting.is_deal180 =
phone_setting.show_code403 =


phone_setting.predial_autodial =
phone_setting.headsetkey_mode =
features.voice_mail_tone_enable =

##############################################################################
#########
##                                  Phone Setting UI
##
##############################################################################
#########
#Configure the active backlight level. It ranges from 1 to 3, the default
value is 2.
#The same level for different phones may result in different backlight
intensities.
phone_setting.active_backlight_level =

##############################################################################
#########
##                                  Phone Setting Display
##
##############################################################################
#########

###Except T20P/T19P/T21P Models
##It configures the backlight time (in seconds).0, 1, 15, 30, 60, 120, 300,
600 or 1800.
```


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```
phone_setting.backlight_time =

###Except T20P/T22P/T41P/T42G Models
###It configures the contrast of the LCD screen.
###For SIP-T19P and SIP-T21P IP phones, it configures the LCD¡¯s contrast of
the phone only.
###For SIP-T26P IP phones, it configures the LCD¡¯s contrast of the connected
EXP39 only.
###For SIP-T28P IP phones, it configures the LCD¡¯s contrast of the IP phone
and the connected EXP39.
###For SIP-T46G IP phones, it configures the LCD¡¯s contrast of the connected
EXP40 only.
###The default value is 6.
phone_setting.contrast =

###Except T46G Model
##It configures the logo mode of the LCD screen (except for SIP-T20P IP
phones).
##For SIP-T19P/T21P/T22P/T26P/T41P/T42G IP phones:
##0-Disabled   1-System logo   2-Custom logo
##The default value is 0.
##For SIP-T28P IP phones:
##1-System logo   2-Custom logo
##The default value is 1.
##It enables or disables a text logo (for SIP-T20P IP phones).
##0-Disabled   1-Enabled
##The default value is 0.
phone_setting.lcd_logo.mode =

###Except T20P/T46G Models
lcd_logo.url =
lcd_logo.delete =

##############################################################################
#########
##                                  Phone Setting BLF
##
##############################################################################
#########
###It enables or disables the phone to automatically configure the BLF list
keys in order.
###0-Disabled,1-Enabled.
###The default value is 1.
phone_setting.auto_blf_list_enable = 1

###Only T26P/T28P/T46G Models support the parameter
###It configures the order of BLF list keys assigned automatically.
###0-Line Keys->Memory Keys->Extension Keys
###1-Extension Keys->Memory Keys->Line Keys
###Memory keys are not applicable to SIP-T46G IP phones.
###The default value is 0.
phone_setting.blf_list_sequence_type =

##############################################################################
#########
##                                  Key Lock
##
##############################################################################
#########
##Except T41P/T42G/T46G Models
phone_setting.lock =

###It configures the password for unlocking the keypad.
###The default value is 123.
phone_setting.phone_lock.unlock_pin =
###It configures the interval (in seconds) to automatically lock the keypad.
###The default value is 0 (the keypad is locked only by long pressing the
pound key or pressing the keypad lock key)
phone_setting.phone_lock.lock_time_out =
phone_setting.emergency.number =
```


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```
##############################################################################
#########
##                                  Multicast
##
##############################################################################
#########

###Except T19P Model
multicast.codec =

multicast.receive_priority.enable =
multicast.receive_priority.priority =

###X ranges from 1 to 10
###multicast.listen_address.X.label =
###multicast.listen_address.X.ip_address =

multicast.listen_address.1.label =
multicast.listen_address.1.ip_address =

##############################################################################
#########
##                                  Super Search
##
##############################################################################
#########
super_search.recent_call =
super_search.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%super_search.xml

##############################################################################
#########
##                                  Security
##
##############################################################################
#########
###Define the login username and password of the user, var and administrator.
###If you change the username of the administrator from "admin" to "admin1",
your new administrator's username should be configured as:
security.user_name.admin = admin1.
###If you change the password of the administrator from "admin" to
"admin1pwd", your new administrator's password should be configured as:
security.user_password = admin1:admin1pwd.

###The following examples change the user's username to "user23" and the
user's password to "user23pwd".
###security.user_name.user = user23
###security.user_password = user23:user23pwd
###The following examples change the var's username to "var55" and the var's
password to "var55pwd".
###security.user_name.var = var55
###security.user_password = var55:var55pwd
security.user_name.user =
security.user_name.admin =
security.user_name.var =
security.user_password =

###It enables or disables the phone to only accept the certificates in the
Trusted Certificates list.
###0-Disabled,1-Enabled.
###The default value is 1.It takes effect after a reboot.
security.trust_certificates =
###It configures the source certificates for the phone to authenticate for TLS
connection.
###0-Default certificates,1-Custom certificates,2-All certificates.
###The default value is 0.It takes effect after a reboot.
security.ca_cert =
###It configures the device certificates for the phone to send for TLS
```


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```
authentication.
###0-Default certificates,1-Custom certificates.
###The default value is 0.It takes effect after a reboot.
security.dev_cert =
###It enables or disables the phone to mandatorily validate the CommonName or
SubjectAltName of the certificate received from the connecting server.
###0-Disabled,1-Enabled.
###The default value is 0.It takes effect after a reboot.
security.cn_validation =

##############################################################################
#########
##                                  User Mode
##
##############################################################################
#########
###It enables or disables the 3-level permissions (admin, user, var).
###0-Disabled,1-Enabled.
###The default value is 0.It takes effect after a reboot.
security.var_enable =
web_item_level.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%WebItemsLevel.cfg

##############################################################################
#########
##                                  Trusted Certificates
##
##############################################################################
#########
trusted_certificates.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%ca.crt
trusted_certificates.delete =

##############################################################################
#########
##                                  Server Certificates
##
##############################################################################
#########
server_certificates.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%server.pem
server_certificates.delete =

##############################################################################
#########
##                                  Memory Key
##
##############################################################################
#########
###T28P X ranges from 1 to 10

#0-NA   1-Conference   2-Forward   3-Transfer   4-Hold   5-DND   7-Call Return
8-SMS   9-Directed Pickup   10-Call Park   11-DTMF   12-Voice Mail   13-Speed
Dial   14-Intercom
#15-Line   16-BLF   17-URL   18-Group Listening   20-Private Hold   22-XML
Group   23-Group Pickup   24-Multicast Paging   25-Record   27-XML Browser
#34-Hot Desking   35-URL Record   38-LDAP   39-BLF List   40-Prefix   41-Zero
Touch   42-ACD   45-Local Group   46-Network Group   49-Custom Button
#50-Keypad Lock   55-Meet-Me Conference   56-Retrieve Park   57-Hoteling   58-
ACD Grace   59-Sisp Code   60-Emergency   61-Directory
###memorykey.X.line =
###memorykey.X.value =
###memorykey.X.pickup_value =
###memorykey.X.type =
###memorykey.X.xml_phonebook =

###It configures the desired line to apply the key feature.
```


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```
###The default value is 1.Integer from 1 to 6
memorykey.1.line =
###It configures the value of the memory key feature.
###For example, when set the key feature to BLF, it configures the number of
the monitored user.
###The default value is blank.
memorykey.1.value =
###It configures the pickup code for BLF feature or conference ID followed by
the # sign for Meet-Me conference feature.
###It only applies to BLF and Meet-Me conference features.
###The default value is blank.
memorykey.1.pickup_value =
###It configures the desired feature for memory key X.
###The default value is 0.
memorykey.1.type =
###It configures the desired local group/XML group/network group for the
memory key X.
###It only applies to the Local Group, XML Group and Network Group features.
###The default value is 0.
memorykey.1.xml_phonebook =

##############################################################################
#########
##                                  Line Key
##
##############################################################################
#########
###T28P X ranges from 1 to 6

#linekey.X.type--Customize the linekey type.
#The valid types are:

#0-NA   1-Conference   2-Forward   3-Transfer   4-Hold   5-DND   7-Call Return
8-SMS   9-Directed Pickup   10-Call Park  11-DTMF   12-Voice Mail   13-Speed
Dial
#14-Intercom   15-Line   16-BLF   17-URL   18-Group Listening  20-Private Hold
22-XML Group   23-Group Pickup  24-Multicast Paging  25-Record   27-XML
Browser
#34-Hot Desking   35-URL Record   38-LDAP   39-BLF List   40-Prefix   41-Zero
Touch   42-ACD   45-Local Group   46-Network Group   49-Custom Button   50-
Keypad Lock
#55-Meet-Me Conference   56-Retrieve Park   57-Hoteling   58-ACD Grace   59-
Sisp Code   60-Emergency   61-Directory

#0-NA £¨Only for T41/T42/T46)
#22-XML Group (Not support T20)
#38-LDAP (Not support T20)
#46-Network Group (Not support T20)
#8-SMS (Only support T21/T46/T22/T26/T28)
#17-URL (Only support T41/T42/T46)
#49-Custom Button (Only support T20/T22/T26/T28)
###linekey.X.line =
###linekey.X.value =
###linekey.X.pickup_value =
###linekey.X.type =
###linekey.X.xml_phonebook =
###linekey.X.label =

###It configures the desired line to apply the key feature.Integer from 1 to 6
linekey.1.line =
###It configures the value of the line key feature.
###For example, when setting the key feature to BLF, it configures the number
of the monitored user.
###The default value is blank.
linekey.1.value =
###It configures the pickup code for BLF feature or conference ID followed by
the # sign for Meet-Me conference feature.
###It only applies to BLF and Meet-Me conference features.
###The default value is blank.
linekey.1.pickup_value =
```


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```
###It configures the key feature for the line key X.
linekey.1.type =
###It configures the desired local group/XML group/network group for the line
key X.
###It only applies to the Local Group, XML Group and Network Group features.
###XML Group and Network Group features are not applicable to SIP-T20P IP
phones.
linekey.1.xml_phonebook =
###It configures the label displayed on the LCD screen for each line key.
###The default value is blank.
linekey.1.label =

##############################################################################
#########
##                                  Programable Key
##
##############################################################################
#########
###T28P X ranges from 1 to 14

#programablekey.x.type--Customize the programmable key type.
#The valid types are:
#0-NA   2-Forward   5-DND   7-Call Return   8-SMS   9-Directed Pickup   13-
Speed Dial
#22-XML Group   23-Group Pickup   27-XML Browser   28-History   30-Menu   31-
Switch Account   32-New SMS
#33-Status   34-Hot Desking   38-LDAP   40-Prefix   41-Zero Touch   43-Local
Directory   44-Network Directory   45-Local Group
#46-Network Group   47-XML Directory   50-Keypad Lock   51-Switch Account Up
52-Switch Account Down   55-Meet-Me Conference   61-Directory

#40-Prefix (Not support T20)
#22-XML Group (Not support T20)
#31-Switch Account (Not support T19/T41/T42/T46)
#38-LDAP (Not support T19/T20)
#46-Network Group (Not support T20)
#8-SMS (Not support T41/T42/T20)
#32-New SMS (Not support T41/T42/T20)
#47-XML Directory (Not support T20)
#44-Network Directory (Not support T20)
#41-Zero Touch (Not support T41/T42/T46)
#34-Hot Desking (Only support T19/T46
#51-Switch Account Up (Only support T41/T42/T46)
#52-Switch Account Down (Only support T41/T42/T46)
###programablekey.X.type =
###programablekey.X.line =
###programablekey.X.value =
###programablekey.X.xml_phonebook =
###programablekey.X.history_type =
###programablekey.X.label =
###programablekey.X.pickup_value =

###It configures the key feature for the programmable key X.
programablekey.1.type = 28
###It configures the desired line to apply the programmable key feature.
programablekey.1.line =
###It configures the value of the programmable key feature.
###For example, when configuring the key feature to be Speed Dial, it
configures the number.
###The default value is blank.
programablekey.1.value =
###It configures the desired local group/XML group/network group for the
programmable key.
###It only applies to the Local Group, XML Group and Network Group features.
###XML Group and Network Group features are not applicable to SIP-T20P IP
phones.
programablekey.1.xml_phonebook =
###It configures the history type of programmable key.
###0-Local History,1-Network History.
###The default value is 0.
```


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```
programablekey.1.history_type =
###It configures the label displayed on the LCD screen for each soft key.
###The default value is blank.
programablekey.1.label = Call Log
###It configures conference ID followed by the # sign for Meet-Me conference
feature.
###It only applies to Meet-Me conference feature.
###The default value is blank.
programablekey.1.pickup_value =

programablekey.2.type = 44
programablekey.2.line =
programablekey.2.value =
programablekey.2.xml_phonebook =
programablekey.2.history_type =
programablekey.2.label = BSFT Dir
programablekey.2.pickup_value =


##############################################################################
#########
##                                  Expansion Key
##
##############################################################################
#########
###T28P X ranges from 1 to 6, Y ranges from 1 to 40

###expansion_module.X.key.Y.type =
###expansion_module.X.key.Y.line =
###expansion_module.X.key.Y.value =
###expansion_module.X.key.Y.pickup_value =
###expansion_module.X.key.Y.label =
###expansion_module.X.key.Y.xml_phonebook =

###It configures the key feature of the expansion module X key Y.
expansion_module.1.key.1.type =
###It configures the desired line to apply the expansion module key
feature.Integer from 1 to 6
expansion_module.1.key.1.line =
###It configures the value of the expansion module key feature.
###The default value is blank.
expansion_module.1.key.1.value =
###It configures the pickup code for BLF feature or conference ID followed by
the # sign for Meet-Me conference feature.
###It only applies to BLF and Meet-Me conference features.
###The default value is blank.
expansion_module.1.key.1.pickup_value =
###It configures the label displayed on the LCD screen of the expansion module
for each key.
###The default value is blank.
expansion_module.1.key.1.label =
###It only applies to the Local Group, XML Group and Network Group
features.Integer from 0 to 48.
expansion_module.1.key.1.xml_phonebook =

##############################################################################
#########
##                                  Forward Always
##
##############################################################################
#########
forward.always.enable =
forward.always.target =
forward.always.on_code =
forward.always.off_code =

##############################################################################
#########
##                                  Forward Busy
##
```


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```
##############################################################################
#########
forward.busy.enable =
forward.busy.target =
forward.busy.on_code =
forward.busy.off_code =

##############################################################################
#########
##                                  Forward No Answer
##
##############################################################################
#########
forward.no_answer.enable =
forward.no_answer.target =
forward.no_answer.timeout =
forward.no_answer.on_code =
forward.no_answer.off_code =

##############################################################################
#########
##                                  Forward International
##
##############################################################################
#########
###It enables or disables the phone to forward incoming calls to international
numbers.
###0-Disabled,1-Enabled.
###The default value is 1.
forward.international.enable =

##############################################################################
#########
##                                  ACD
##
##############################################################################
#########
acd.auto_available =
acd.auto_available_timer =

##############################################################################
#########
##                                  Hotdesking Startup
##
##############################################################################
#########
phone_setting.logon_wizard =
hotdesking.startup_register_name_enable =
hotdesking.startup_username_enable =
hotdesking.startup_password_enable =
hotdesking.startup_sip_server_enable =
hotdesking.startup_outbound_enable =

##############################################################################
#########
##                                  Hotdesking Dsskey
##
##############################################################################
#########
hotdesking.dsskey_register_name_enable =
hotdesking.dsskey_username_enable =
hotdesking.dsskey_password_enable =
hotdesking.dsskey_sip_server_enable =
hotdesking.dsskey_outbound_enable =

##############################################################################
#########
##                                  Alert Info
##
##############################################################################
```


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```
#########
###X ranges from 1 to 100
###distinctive_ring_tones.alert_info.x.text =
###distinctive_ring_tones.alert_info.x.ringer =

###It configures the internal ringer text for distinctive ringtone.
###Example: distinctive_ring_tones.alert_info.1.text = Family
###The default value is blank.
distinctive_ring_tones.alert_info.1.text =
###It configures the desired ring tones for each text.
###The value ranges from 1 to 8, the digit stands for the appropriate
ringtone.
###Ring tones 6-8 are only applicable to SIP-T46G IP phones.
###The default value is 1.
distinctive_ring_tones.alert_info.1.ringer =

##############################################################################
#########
##                                  Call Waiting
##
##############################################################################
#########
call_waiting.enable = %CALL_WAITING_BINARY%
call_waiting.tone =
call_waiting.on_code =
call_waiting.off_code =

##############################################################################
#########
##                                  Action URL
##
##############################################################################
#########
action_url.setup_completed =
action_url.registered =
action_url.unregistered =
action_url.register_failed =
action_url.off_hook =
action_url.on_hook =
action_url.incoming_call =
action_url.outgoing_call =
action_url.call_established =
action_url.dnd_on =
action_url.dnd_off =
action_url.always_fwd_on =
action_url.always_fwd_off =
action_url.busy_fwd_on =
action_url.busy_fwd_off =
action_url.no_answer_fwd_on =
action_url.no_answer_fwd_off =
action_url.transfer_call =
action_url.blind_transfer_call =
action_url.attended_transfer_call =
action_url.hold =
action_url.unhold =
action_url.mute =
action_url.unmute =
action_url.missed_call =
action_url.call_terminated =
action_url.busy_to_idle =
action_url.idle_to_busy =
action_url.ip_change =
action_url.forward_incoming_call =
action_url.reject_incoming_call =
action_url.answer_new_incoming_call =
action_url.transfer_finished =
action_url.transfer_failed =

##############################################################################
#########
```


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```
##                                   Contact
##
#################################################################################
#########
local_contact.data.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%contact.xml

###(Except T20P Model)
directory_setting.url =

#################################################################################
#########
##                                   Custom Factory Configuration
##
#################################################################################
#########
custom_factory_configuration.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%factory.cfg
features.custom_factory_config.enable =

#################################################################################
#########
##                                   Custom  Configuration
##
#################################################################################
#########
configuration.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%config.bin

#################################################################################
#########
##                                   Custom Softkey
##
#################################################################################
#########
phone_setting.custom_softkey_enable =
custom_softkey_call_failed.url =
custom_softkey_call_in.url =
custom_softkey_connecting.url =
custom_softkey_dialing.url =
custom_softkey_ring_back.url =
custom_softkey_talking.url =

#################################################################################
#########
##                                   Configure the access URL of firmware
##
#################################################################################
#########
###It configures the access URL of the firmware file.
###The default value is blank.It takes effect after a reboot.
firmware.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%%T28_FIRMWARE%
```

Phone-Specific File: <MAC Address>.cfg

NOTE: This is an example file and should be used for reference only.

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```
#!version:1.0.0.1

##File header "#!version:1.0.0.1" can not be edited or deleted, and must be
placed in the first line.##

##############################################################################
#########
##                            Account1 Basic Settings
##
##############################################################################
#########
account.1.enable = %BWLINE-BINARY-1%
account.1.label = %BWEXTENSION-1%
account.1.display_name = %BWCLID-1%
account.1.auth_name = %BWAUTHUSER-1%
account.1.user_name = %BWLINEPORT-1%
account.1.password = %BWAUTHPASSWORD-1%
account.1.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.1.outbound_host = %SBC_ADDRESS%
account.1.outbound_port = %SBC_PORT%
##It configures the local SIP port for account 1. The default value is 5060.
account.1.sip_listen_port =
##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-
NAPTR
##The default value is 0.
account.1.transport = %TRANSPORT_TYPE%

##############################################################################
#########
##                            Failback
##
##############################################################################
#########
account.1.reregister_enable =
account.1.naptr_build =
account.1.fallback.redundancy_type =
account.1.fallback.timeout =
account.1.sip_server.1.address = %BWHOST-1%
account.1.sip_server.1.port =
account.1.sip_server.1.expires =
account.1.sip_server.1.retry_counts =
account.1.sip_server.1.failback_mode =
account.1.sip_server.1.failback_timeout =
account.1.sip_server.1.register_on_enable =

account.1.sip_server.2.address =
account.1.sip_server.2.port =
account.1.sip_server.2.expires =
account.1.sip_server.2.retry_counts =
account.1.sip_server.2.failback_mode =
account.1.sip_server.2.failback_timeout =
account.1.sip_server.2.register_on_enable =

account.1.dns_cache_type =
account.1.dns_cache_a.1.name =
account.1.dns_cache_a.1.ip =
account.1.dns_cache_a.1.ttl =
account.1.dns_cache_srv.1.name =
account.1.dns_cache_srv.1.port =
account.1.dns_cache_srv.1.priority =
account.1.dns_cache_srv.1.target =
account.1.dns_cache_srv.1.weight =
account.1.dns_cache_srv.1.ttl =
account.1.dns_cache_naptr.1.name =
account.1.dns_cache_naptr.1.flags =
account.1.dns_cache_naptr.1.order =
account.1.dns_cache_naptr.1.preference =
account.1.dns_cache_naptr.1.replace =
account.1.dns_cache_naptr.1.service =
account.1.dns_cache_naptr.1.ttl =
```


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```
account.1.dns_cache_type =
account.1.dns_cache_a.2.name =
account.1.dns_cache_a.2.ip =
account.1.dns_cache_a.2.ttl =
account.1.dns_cache_srv.2.name =
account.1.dns_cache_srv.2.port =
account.1.dns_cache_srv.2.priority =
account.1.dns_cache_srv.2.target =
account.1.dns_cache_srv.2.weight =
account.1.dns_cache_srv.2.ttl =
account.1.dns_cache_naptr.2.name =
account.1.dns_cache_naptr.2.flags =
account.1.dns_cache_naptr.2.order =
account.1.dns_cache_naptr.2.preference =
account.1.dns_cache_naptr.2.replace =
account.1.dns_cache_naptr.2.service =
account.1.dns_cache_naptr.2.ttl =

account.1.static_cache_pri =

##############################################################################
#########
##                            Register Advanced
##
##############################################################################
#########
##It configures the SIP server type for account X.0-Default,2-BroadSoft,4-
Cosmocom,6-UCAP
##The default value is 0.
account.1.sip_server_type = 2
account.1.unregister_on_reboot =
account.1.sip_trust_ctrl =
account.1.proxy_require =
account.1.srv_ttl_timer_enable =
account.1.register_mac =
account.1.register_line =
account.1.reg_fail_retry_interval =

##############################################################################
########
##                      NAT Settings
##
##############################################################################
########
##It enables or disables the NAT traversal for account X.0-Disabled,1-Enabled
##The default value is 0.
account.1.nat.nat_traversal =
##It configures the IP address or domain name of the STUN server for account
X.
##The default value is blank.
account.1.nat.stun_server =
##It configures the port of the STUN server for account X.
##The default value is 3478.
account.1.nat.stun_port =
##It configures the type of keep-alive packets sent by the phone to the NAT
device to keep the communication port open so that NAT can continue to
function for account X.
##0-Dsiabled,1-Default: the phone sends UDP packets to the server,2-Option:
the phone sends SIP OPTION packets to the server,3-Notify: the phone sends SIP
NOTIFY packets to the server.
##The default value is 1.
account.1.nat.udp_update_enable =
##It configures the keep-alive interval (in seconds) for account X.
##The default value is 30.Integer from 15 to 2147483647
account.1.nat.udp_update_time =
##It enables or disables NAT Rport feature for account X.0-Disabled,1-Enabled
##The default value is 0.
account.1.nat.rport =
```


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```
##############################################################################
#########
##                            Account1 Advance Settings
##
##############################################################################
#########
account.1.advanced.timer_t1 =
account.1.advanced.timer_t2 =
account.1.advanced.timer_t4 =

##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.1 = %BWVOICE-PORTAL-NUMBER-1%

##############################################################################
#########
##                            Subscribe
##
##############################################################################
#########
##It enables or disables the phone to subscribe the message waiting indicator
for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.subscribe_mwi =
##It configures the interval (in seconds) of MWI subscription for account X.
##The default value is 3600.
account.1.subscribe_mwi_expires =
##It enables or disables the phone to subscribe to the voice mail number for
the message waiting indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.subscribe_mwi_to_vm =
##It configures the period (in seconds) of ACD subscription for account X.
##The default value is 1800.
account.1.subscribe_acd_expires=

##############################################################################
#########
##                            BLF List
##
##############################################################################
#########
##It configures the BLF List URI to monitor a list of users for account X.
##The default value is blank.
account.1.blf.blf_list_uri = %BWBLF-URI-1%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.1.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-1%
##It configures the feature access code for directed call pickup with barge-in
(default: *33) for account X.
##The default value is blank.
account.1.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-
1%

##It configures the period (in seconds) of the BLF subscription for account X.
account.1.blf.subscribe_period =
##It configures the event of the BLF subscription for account X.0-Dialog,1-
Presence.
##The default value is 0.
account.1.blf.subscribe_event =
##It enables or disables the phone to handle NOTIFY messages out of the BLF
dialog for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.out_dialog_blf_enable =

##############################################################################
#########
##                            BLA/SCA
##
##############################################################################
```


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```
#########
##It enables or disables Broadsoft SCA feature for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.1.shared_line = %BWSHAREDLINE-BINARY-1%
##It configures the BLA number for account X.
##The default value is blank.
account.1.bla_number =
##It configures the period (in seconds) of BLA subscription for account X.
##The default value is 300.Integer from 60 to 7200
account.1.bla_subscribe_period =

##############################################################################
#########
##                            Audio Codec
##
##############################################################################
#########
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P support codec1~codec11
###T41P/T42G/T46G support codec1~codec12

account.1.codec.1.enable =
account.1.codec.1.payload_type =
account.1.codec.1.priority =
account.1.codec.1.rtpmap =

account.1.codec.2.enable =
account.1.codec.2.payload_type =
account.1.codec.2.priority =
account.1.codec.2.rtpmap =

account.1.codec.3.enable =
account.1.codec.3.payload_type =
account.1.codec.3.priority =
account.1.codec.3.rtpmap =

account.1.codec.4.enable =
account.1.codec.4.payload_type =
account.1.codec.4.priority =
account.1.codec.4.rtpmap =

account.1.codec.5.enable =
account.1.codec.5.payload_type =
account.1.codec.5.priority =
account.1.codec.5.rtpmap =

account.1.codec.6.enable =
account.1.codec.6.payload_type =
account.1.codec.6.priority =
account.1.codec.6.rtpmap =

account.1.codec.7.enable =
account.1.codec.7.payload_type =
account.1.codec.7.priority =
account.1.codec.7.rtpmap =

account.1.codec.8.enable =
account.1.codec.8.payload_type =
account.1.codec.8.priority =
account.1.codec.8.rtpmap =

account.1.codec.9.enable =
account.1.codec.9.payload_type =
account.1.codec.9.priority =
account.1.codec.9.rtpmap =

account.1.codec.10.enable =
account.1.codec.10.payload_type =
account.1.codec.10.priority =
```


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```
account.1.codec.10.rtpmap =

account.1.codec.11.enable =
account.1.codec.11.payload_type =
account.1.codec.11.priority =
account.1.codec.11.rtpmap =


##############################################################################
#########
##                            Audio Advanced
##
##############################################################################
#########
##It configures whether to use voice encryption service for account X.0-
Disabled,1-Optional,2-Compulsory.
##The default value is 0.
account.1.srtp_encryption =
##It configures the RTP packet time for account X.0 (Disabled), 10, 20, 30,
40, 50 or 60.
##The default value is 20.
account.1.ptime =

##############################################################################
#########
##                            Anonymous Call
##
##############################################################################
#########
account.1.send_anonymous_code =
account.1.anonymous_call =
account.1.anonymous_call_oncode =
account.1.anonymous_call_offcode =
account.1.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.1.anonymous_reject_oncode =
account.1.anonymous_reject_offcode =

##############################################################################
#########
##                            Pickup Code
##
##############################################################################
#########
##It enables or disables the phone to pick up a call according to the SIP
header of dialog-info for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.dialoginfo_callpickup =
##It configures the group pickup code for account X.
##The default value is blank.
account.1.group_pickup_code = %BWFAC-CALL-PICKUP-1%
##It configures the directed pickup code for account X.
##The default value is blank.
account.1.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-1%

##############################################################################
#########
##                            DTMF
##
##############################################################################
#########
account.1.dtmf.type =
account.1.dtmf.info_type =
account.1.dtmf.dtmf_payload =

##############################################################################
#########
##                            Alert info
##
##############################################################################
#########
```


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```
##It enables or disables the distinctive ringtones by the Alert-Info SIP
header for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.alert_info_url_enable =
account.1.ringtone.ring_type =

##############################################################################
#########
##                            Conference
##
##############################################################################
#########
##It configures the conference type for account X.0-Local Conference,2-Network
Conference.
##The default value is 0.
account.1.conf_type =
##It configures the network conference URI for account X.
##The default value is blank.
account.1.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-1%

##############################################################################
#########
##                            CID Source
##
##############################################################################
#########
account.1.cid_source =
account.1.cid_source_privacy =
account.1.cid_source_ppi =
account.1.cp_source =

##############################################################################
#########
##                            Session Timer
##
##############################################################################
#########
account.1.session_timer.enable =
account.1.session_timer.expires =
account.1.session_timer.refresher =

##############################################################################
#########
##                            Music on Hold
##
##############################################################################
#########
##It configures the way on how the phone processes Music On Hold when placing
an active call on hold for account X.
##0-Calling the music server before holding
##1-Calling the music server after holding
##The default value is 0.
account.1.music_on_hold_type =
##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.1.music_server_uri =

##############################################################################
#########
##                            Advanced
##
##############################################################################
#########
account.1.auto_answer = %AUTO_ANSWER_BINARY%
account.1.missed_calllog =
account.1.100rel_enable =
account.1.enable_user_equal_phone =
account.1.compact_header_enable =

##############################################################################
```


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```
#########
##                                  DND
##
###############################################################################
#########
account.1.dnd.enable =
account.1.dnd.on_code =
account.1.dnd.off_code =

###############################################################################
#########
##                                  Call Forward
##
###############################################################################
#########
account.1.always_fwd.enable =
account.1.always_fwd.target =
account.1.always_fwd.off_code =
account.1.always_fwd.on_code =
account.1.busy_fwd.enable =
account.1.busy_fwd.target =
account.1.busy_fwd.off_code =
account.1.busy_fwd.on_code =
account.1.timeout_fwd.enable =
account.1.timeout_fwd.target =
account.1.timeout_fwd.timeout =
account.1.timeout_fwd.off_code =
account.1.timeout_fwd.on_code =

###############################################################################
#########
##                                  Broadsoft Hoteling
##
###############################################################################
#########
account.1.hoteling.enable =
account.1.hoteling.user_id =
account.1.hoteling.password =
account.1.hoteling.auto_login_enable =

###############################################################################
#########
##                                  Broadsoft ACD
##
###############################################################################
#########
account.1.acd.enable =
account.1.acd.unavailable_reason_enable =
account.1.acd.available =
account.1.acd.initial_state =

###############################################################################
#########
##                                  Broadsoft ACD Call Center
##
###############################################################################
#########
account.1.reason_code.1 =
account.1.reason_code_name.1 =
account.1.bw_disp_code.1 =
account.1.bw_disp_code_name.1 =
account.1.supervisor_info_code.1 =
account.1.supervisor_info_code_name.1 =

###############################################################################
#########
##                                  Broadsoft Call Center
##
###############################################################################
#########
```


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```
account.1.call_center.call_info_enable =
account.1.call_center.show_call_info_time =
account.1.call_center.disp_code_enable =
account.1.call_center.trace_enable =
account.1.call_center.emergency_enable =
account.1.call_center.queue_status_enable =
account.1.call_center.queue_status_light_enable =

##############################################################################
#########
##                          Account2 Basic Settings
##
##############################################################################
#########
account.2.enable = %BWLINE-BINARY-2%
account.2.label = %BWEXTENSION-2%
account.2.display_name = %BWCLID-2%
account.2.auth_name = %BWAUTHUSER-2%
account.2.user_name = %BWLINEPORT-2%
account.2.password = %BWAUTHPASSWORD-2%
account.2.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.2.outbound_host = %SBC_ADDRESS%
account.2.outbound_port = %SBC_PORT%
account.2.sip_listen_port =
account.2.transport = %TRANSPORT_TYPE%

##############################################################################
#########
##                          Failback
##
##############################################################################
#########
account.2.reregister_enable =
account.2.naptr_build =
account.2.fallback.redundancy_type =
account.2.fallback.timeout =
account.2.sip_server.1.address = %BWHOST-2%
account.2.sip_server.1.port =
account.2.sip_server.1.expires =
account.2.sip_server.1.retry_counts =
account.2.sip_server.1.failback_mode =
account.2.sip_server.1.failback_timeout =
account.2.sip_server.1.register_on_enable =

account.2.sip_server.2.address =
account.2.sip_server.2.port =
account.2.sip_server.2.expires =
account.2.sip_server.2.retry_counts =
account.2.sip_server.2.failback_mode =
account.2.sip_server.2.failback_timeout =
account.2.sip_server.2.register_on_enable =

account.2.dns_cache_type =
account.2.dns_cache_a.1.name =
account.2.dns_cache_a.1.ip =
account.2.dns_cache_a.1.ttl =
account.2.dns_cache_srv.1.name =
account.2.dns_cache_srv.1.port =
account.2.dns_cache_srv.1.priority =
account.2.dns_cache_srv.1.target =
account.2.dns_cache_srv.1.weight =
account.2.dns_cache_srv.1.ttl =
account.2.dns_cache_naptr.1.name =
account.2.dns_cache_naptr.1.flags =
account.2.dns_cache_naptr.1.order =
account.2.dns_cache_naptr.1.preference =
account.2.dns_cache_naptr.1.replace =
account.2.dns_cache_naptr.1.service =
account.2.dns_cache_naptr.1.ttl =
```


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```
account.2.dns_cache_type =
account.2.dns_cache_a.2.name =
account.2.dns_cache_a.2.ip =
account.2.dns_cache_a.2.ttl =
account.2.dns_cache_srv.2.name =
account.2.dns_cache_srv.2.port =
account.2.dns_cache_srv.2.priority =
account.2.dns_cache_srv.2.target =
account.2.dns_cache_srv.2.weight =
account.2.dns_cache_srv.2.ttl =
account.2.dns_cache_naptr.2.name =
account.2.dns_cache_naptr.2.flags =
account.2.dns_cache_naptr.2.order =
account.2.dns_cache_naptr.2.preference =
account.2.dns_cache_naptr.2.replace =
account.2.dns_cache_naptr.2.service =
account.2.dns_cache_naptr.2.ttl =

account.2.static_cache_pri =

##############################################################################
#########
##                            Register Advanced
##
##############################################################################
#########
account.2.sip_server_type = 2
account.2.unregister_on_reboot =
account.2.sip_trust_ctrl =
account.2.proxy_require =
account.2.srv_ttl_timer_enable =
account.2.register_mac =
account.2.register_line =
account.2.reg_fail_retry_interval =

##############################################################################
##                       NAT Settings                                       ##
##############################################################################
account.2.nat.nat_traversal =
account.2.nat.stun_server =
account.2.nat.stun_port =
account.2.nat.udp_update_enable =
account.2.nat.udp_update_time =
account.2.nat.rport =

##############################################################################
#########
##                             Account2 Advance Settings
##
##############################################################################
#########
account.2.advanced.timer_t1 =
account.2.advanced.timer_t2 =
account.2.advanced.timer_t4 =

voice_mail.number.2 = %BWVOICE-PORTAL-NUMBER-2%

##############################################################################
#########
##                             Subscribe
##
##############################################################################
#########
account.2.subscribe_mwi =
account.2.subscribe_mwi_expires =
account.2.subscribe_mwi_to_vm =
account.2.subscribe_acd_expires=

##############################################################################
#########
```


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```
##                              BLF List
##
#############################################################################
#########

account.2.blf.blf_list_uri = %BWBLF-URI-2%
account.2.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-2%
account.2.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-
2%

account.2.blf.subscribe_period =
account.2.blf.subscribe_event =
account.2.out_dialog_blf_enable =

#############################################################################
#########
##                              BLA/SCA
##
#############################################################################
#########
account.2.shared_line = %BWSHAREDLINE-BINARY-2%
account.2.bla_number =
account.2.bla_subscribe_period =

#############################################################################
#########
##                              Audio Codec
##
#############################################################################
#########
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P support codec1~codec11
###T41P/T42G/T46G support codec1~codec12

account.2.codec.1.enable =
account.2.codec.1.payload_type =
account.2.codec.1.priority =
account.2.codec.1.rtpmap =

account.2.codec.2.enable =
account.2.codec.2.payload_type =
account.2.codec.2.priority =
account.2.codec.2.rtpmap =

account.2.codec.3.enable =
account.2.codec.3.payload_type =
account.2.codec.3.priority =
account.2.codec.3.rtpmap =

account.2.codec.4.enable =
account.2.codec.4.payload_type =
account.2.codec.4.priority =
account.2.codec.4.rtpmap =

account.2.codec.5.enable =
account.2.codec.5.payload_type =
account.2.codec.5.priority =
account.2.codec.5.rtpmap =

account.2.codec.6.enable =
account.2.codec.6.payload_type =
account.2.codec.6.priority =
account.2.codec.6.rtpmap =

account.2.codec.7.enable =
account.2.codec.7.payload_type =
account.2.codec.7.priority =
account.2.codec.7.rtpmap =

account.2.codec.8.enable =
```


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```
account.2.codec.8.payload_type =
account.2.codec.8.priority =
account.2.codec.8.rtpmap =

account.2.codec.9.enable =
account.2.codec.9.payload_type =
account.2.codec.9.priority =
account.2.codec.9.rtpmap =

account.2.codec.10.enable =
account.2.codec.10.payload_type =
account.2.codec.10.priority =
account.2.codec.10.rtpmap =

account.2.codec.11.enable =
account.2.codec.11.payload_type =
account.2.codec.11.priority =
account.2.codec.11.rtpmap =



##############################################################################
#########
##                            Audio Advanced
##
##############################################################################
#########
account.2.srtp_encryption =
account.2.ptime =

##############################################################################
#########
##                            Anonymous Call
##
##############################################################################
#########
account.2.send_anonymous_code =
account.2.anonymous_call =
account.2.anonymous_call_oncode =
account.2.anonymous_call_offcode =
account.2.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.2.anonymous_reject_oncode =
account.2.anonymous_reject_offcode =

##############################################################################
#########
##                            Pickup Code
##
##############################################################################
#########
account.2.dialoginfo_callpickup =
account.2.group_pickup_code = %BWFAC-CALL-PICKUP-2%
account.2.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-2%

##############################################################################
#########
##                            DTMF
##
##############################################################################
#########
account.2.dtmf.type =
account.2.dtmf.info_type =
account.2.dtmf.dtmf_payload =

##############################################################################
#########
##                            Alert info
##
##############################################################################
#########
```


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```
account.2.alert_info_url_enable =
account.2.ringtone.ring_type =

##############################################################################
#########
##                            Conference
##
##############################################################################
#########
account.2.conf_type =
account.2.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-2%

##############################################################################
#########
##                            CID Source
##
##############################################################################
#########
account.2.cid_source =
account.2.cid_source_privacy =
account.2.cid_source_ppi =
account.2.cp_source =

##############################################################################
#########
##                            Session Timer
##
##############################################################################
#########
account.2.session_timer.enable =
account.2.session_timer.expires =
account.2.session_timer.refresher =

##############################################################################
#########
##                            Music on Hold
##
##############################################################################
#########
account.2.music_on_hold_type =
account.2.music_server_uri =

##############################################################################
#########
##                            Advanced
##
##############################################################################
#########
account.2.auto_answer = %AUTO_ANSWER_BINARY%
account.2.missed_calllog =
account.2.100rel_enable =
account.2.enable_user_equal_phone =
account.2.compact_header_enable =

##############################################################################
#########
##                                DND
##
##############################################################################
#########
account.2.dnd.enable =
account.2.dnd.on_code =
account.2.dnd.off_code =

##############################################################################
#########
##                              Call Forward
##
##############################################################################
#########
```


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```
account.2.always_fwd.enable =
account.2.always_fwd.target =
account.2.always_fwd.off_code =
account.2.always_fwd.on_code =
account.2.busy_fwd.enable =
account.2.busy_fwd.target =
account.2.busy_fwd.off_code =
account.2.busy_fwd.on_code =
account.2.timeout_fwd.enable =
account.2.timeout_fwd.target =
account.2.timeout_fwd.timeout =
account.2.timeout_fwd.off_code =
account.2.timeout_fwd.on_code =

##############################################################################
#########
##                                Broadsoft Hoteling
##
##############################################################################
#########
account.2.hoteling.enable =
account.2.hoteling.user_id =
account.2.hoteling.password =
account.2.hoteling.auto_login_enable =

##############################################################################
#########
##                                Broadsoft ACD
##
##############################################################################
#########
account.2.acd.enable =
account.2.acd.unavailable_reason_enable =
account.2.acd.available =
account.2.acd.initial_state =

##############################################################################
#########
##                                Broadsoft ACD Call Center
##
##############################################################################
#########
account.2.reason_code.1 =
account.2.reason_code_name.1 =
account.2.bw_disp_code.1 =
account.2.bw_disp_code_name.1 =
account.2.supervisor_info_code.1 =
account.2.supervisor_info_code_name.1 =

##############################################################################
#########
##                                Broadsoft Call Center
##
##############################################################################
#########
account.2.call_center.call_info_enable =
account.2.call_center.show_call_info_time =
account.2.call_center.disp_code_enable =
account.2.call_center.trace_enable =
account.2.call_center.emergency_enable =
account.2.call_center.queue_status_enable =
account.2.call_center.queue_status_light_enable =


##############################################################################
#########
##                           Account3 Basic Settings
##
##############################################################################
#########
```


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```
account.3.enable = %BWLINE-BINARY-3%
account.3.label = %BWEXTENSION-3%
account.3.display_name = %BWCLID-3%
account.3.auth_name = %BWAUTHUSER-3%
account.3.user_name = %BWLINEPORT-3%
account.3.password = %BWAUTHPASSWORD-3%
account.3.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.3.outbound_host = %SBC_ADDRESS%
account.3.outbound_port = %SBC_PORT%
account.3.sip_listen_port =
account.3.transport = %TRANSPORT_TYPE%

##############################################################################
#########
##                          Failback
##
##############################################################################
#########
account.3.reregister_enable =
account.3.naptr_build =
account.3.fallback.redundancy_type =
account.3.fallback.timeout =
account.3.sip_server.1.address = %BWHOST-3%
account.3.sip_server.1.port =
account.3.sip_server.1.expires =
account.3.sip_server.1.retry_counts =
account.3.sip_server.1.failback_mode =
account.3.sip_server.1.failback_timeout =
account.3.sip_server.1.register_on_enable =

account.3.sip_server.2.address =
account.3.sip_server.2.port =
account.3.sip_server.2.expires =
account.3.sip_server.2.retry_counts =
account.3.sip_server.2.failback_mode =
account.3.sip_server.2.failback_timeout =
account.3.sip_server.2.register_on_enable =

account.3.dns_cache_type =
account.3.dns_cache_a.1.name =
account.3.dns_cache_a.1.ip =
account.3.dns_cache_a.1.ttl =
account.3.dns_cache_srv.1.name =
account.3.dns_cache_srv.1.port =
account.3.dns_cache_srv.1.priority =
account.3.dns_cache_srv.1.target =
account.3.dns_cache_srv.1.weight =
account.3.dns_cache_srv.1.ttl =
account.3.dns_cache_naptr.1.name =
account.3.dns_cache_naptr.1.flags =
account.3.dns_cache_naptr.1.order =
account.3.dns_cache_naptr.1.preference =
account.3.dns_cache_naptr.1.replace =
account.3.dns_cache_naptr.1.service =
account.3.dns_cache_naptr.1.ttl =

account.3.dns_cache_type =
account.3.dns_cache_a.2.name =
account.3.dns_cache_a.2.ip =
account.3.dns_cache_a.2.ttl =
account.3.dns_cache_srv.2.name =
account.3.dns_cache_srv.2.port =
account.3.dns_cache_srv.2.priority =
account.3.dns_cache_srv.2.target =
account.3.dns_cache_srv.2.weight =
account.3.dns_cache_srv.2.ttl =
account.3.dns_cache_naptr.2.name =
account.3.dns_cache_naptr.2.flags =
account.3.dns_cache_naptr.2.order =
account.3.dns_cache_naptr.2.preference =
```


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```
account.3.dns_cache_naptr.2.replace =
account.3.dns_cache_naptr.2.service =
account.3.dns_cache_naptr.2.ttl =

account.3.static_cache_pri =

##############################################################################
#########
##                            Register Advanced
##
##############################################################################
#########
account.3.sip_server_type = 2
account.3.unregister_on_reboot =
account.3.sip_trust_ctrl =
account.3.proxy_require =
account.3.srv_ttl_timer_enable =
account.3.register_mac =
account.3.register_line =
account.3.reg_fail_retry_interval =

##############################################################################
##                       NAT Settings                                       ##
##############################################################################
account.3.nat.nat_traversal =
account.3.nat.stun_server =
account.3.nat.stun_port =
account.3.nat.udp_update_enable =
account.3.nat.udp_update_time =
account.3.nat.rport =

##############################################################################
#########
##                             Account3 Advance Settings
##
##############################################################################
#########
account.3.advanced.timer_t1 =
account.3.advanced.timer_t2 =
account.3.advanced.timer_t4 =

voice_mail.number.3 = %BWVOICE-PORTAL-NUMBER-3%

##############################################################################
#########
##                             Subscribe
##
##############################################################################
#########
account.3.subscribe_mwi =
account.3.subscribe_mwi_expires =
account.3.subscribe_mwi_to_vm =
account.3.subscribe_acd_expires=

##############################################################################
#########
##                             BLF List
##
##############################################################################
#########

account.3.blf.blf_list_uri = %BWBLF-URI-3%
account.3.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-3%
account.3.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-
3%

account.3.blf.subscribe_period =
account.3.blf.subscribe_event =
account.3.out_dialog_blf_enable =
```


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```
##############################################################################
#########
##                            BLA/SCA
##
##############################################################################
#########
account.3.shared_line = %BWSHAREDLINE-BINARY-3%
account.3.bla_number =
account.3.bla_subscribe_period =

##############################################################################
#########
##                            Audio Codec
##
##############################################################################
#########
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P support codec1~codec11
###T41P/T42G/T46G support codec1~codec12

account.3.codec.1.enable =
account.3.codec.1.payload_type =
account.3.codec.1.priority =
account.3.codec.1.rtpmap =

account.3.codec.2.enable =
account.3.codec.2.payload_type =
account.3.codec.2.priority =
account.3.codec.2.rtpmap =

account.3.codec.3.enable =
account.3.codec.3.payload_type =
account.3.codec.3.priority =
account.3.codec.3.rtpmap =

account.3.codec.4.enable =
account.3.codec.4.payload_type =
account.3.codec.4.priority =
account.3.codec.4.rtpmap =

account.3.codec.5.enable =
account.3.codec.5.payload_type =
account.3.codec.5.priority =
account.3.codec.5.rtpmap =

account.3.codec.6.enable =
account.3.codec.6.payload_type =
account.3.codec.6.priority =
account.3.codec.6.rtpmap =

account.3.codec.7.enable =
account.3.codec.7.payload_type =
account.3.codec.7.priority =
account.3.codec.7.rtpmap =

account.3.codec.8.enable =
account.3.codec.8.payload_type =
account.3.codec.8.priority =
account.3.codec.8.rtpmap =

account.3.codec.9.enable =
account.3.codec.9.payload_type =
account.3.codec.9.priority =
account.3.codec.9.rtpmap =

account.3.codec.10.enable =
account.3.codec.10.payload_type =
account.3.codec.10.priority =
account.3.codec.10.rtpmap =
```


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```
account.3.codec.11.enable =
account.3.codec.11.payload_type =
account.3.codec.11.priority =
account.3.codec.11.rtpmap =

##############################################################################
#########
##                            Audio Advanced
##
##############################################################################
#########
account.3.srtp_encryption =
account.3.ptime =

##############################################################################
#########
##                            Anonymous Call
##
##############################################################################
#########
account.3.send_anonymous_code =
account.3.anonymous_call =
account.3.anonymous_call_oncode =
account.3.anonymous_call_offcode =
account.3.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.3.anonymous_reject_oncode =
account.3.anonymous_reject_offcode =

##############################################################################
#########
##                            Pickup Code
##
##############################################################################
#########
account.3.dialoginfo_callpickup =
account.3.group_pickup_code = %BWFAC-CALL-PICKUP-3%
account.3.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-3%

##############################################################################
#########
##                            DTMF
##
##############################################################################
#########
account.3.dtmf.type =
account.3.dtmf.info_type =
account.3.dtmf.dtmf_payload =

##############################################################################
#########
##                            Alert info
##
##############################################################################
#########
account.3.alert_info_url_enable =
account.3.ringtone.ring_type =

##############################################################################
#########
##                            Conference
##
##############################################################################
#########
account.3.conf_type =
account.3.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-3%

##############################################################################
#########
##                            CID Source
##
```


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```
##############################################################################
#########
account.3.cid_source =
account.3.cid_source_privacy =
account.3.cid_source_ppi =
account.3.cp_source =

##############################################################################
#########
##                            Session Timer
##
##############################################################################
#########
account.3.session_timer.enable =
account.3.session_timer.expires =
account.3.session_timer.refresher =

##############################################################################
#########
##                            Music on Hold
##
##############################################################################
#########
account.3.music_on_hold_type =
account.3.music_server_uri =

##############################################################################
#########
##                            Advanced
##
##############################################################################
#########
account.3.auto_answer = %AUTO_ANSWER_BINARY%
account.3.missed_calllog =
account.3.100rel_enable =
account.3.enable_user_equal_phone =
account.3.compact_header_enable =

##############################################################################
#########
##                                DND
##
##############################################################################
#########
account.3.dnd.enable =
account.3.dnd.on_code =
account.3.dnd.off_code =

##############################################################################
#########
##                              Call Forward
##
##############################################################################
#########
account.3.always_fwd.enable =
account.3.always_fwd.target =
account.3.always_fwd.off_code =
account.3.always_fwd.on_code =
account.3.busy_fwd.enable =
account.3.busy_fwd.target =
account.3.busy_fwd.off_code =
account.3.busy_fwd.on_code =
account.3.timeout_fwd.enable =
account.3.timeout_fwd.target =
account.3.timeout_fwd.timeout =
account.3.timeout_fwd.off_code =
account.3.timeout_fwd.on_code =

##############################################################################
#########
```


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```
##                                  Broadsoft Hoteling
##
#############################################################################
#########
account.3.hoteling.enable =
account.3.hoteling.user_id =
account.3.hoteling.password =
account.3.hoteling.auto_login_enable =

#############################################################################
#########
##                                  Broadsoft ACD
##
#############################################################################
#########
account.3.acd.enable =
account.3.acd.unavailable_reason_enable =
account.3.acd.available =
account.3.acd.initial_state =

#############################################################################
#########
##                                  Broadsoft ACD Call Center
##
#############################################################################
#########
account.3.reason_code.1 =
account.3.reason_code_name.1 =
account.3.bw_disp_code.1 =
account.3.bw_disp_code_name.1 =
account.3.supervisor_info_code.1 =
account.3.supervisor_info_code_name.1 =

#############################################################################
#########
##                                  Broadsoft Call Center
##
#############################################################################
#########
account.3.call_center.call_info_enable =
account.3.call_center.show_call_info_time =
account.3.call_center.disp_code_enable =
account.3.call_center.trace_enable =
account.3.call_center.emergency_enable =
account.3.call_center.queue_status_enable =
account.3.call_center.queue_status_light_enable =


#############################################################################
#########
##                            Account4 Basic Settings
##
#############################################################################
#########
account.4.enable = %BWLINE-BINARY-4%
account.4.label = %BWEXTENSION-4%
account.4.display_name = %BWCLID-4%
account.4.auth_name = %BWAUTHUSER-4%
account.4.user_name = %BWLINEPORT-4%
account.4.password = %BWAUTHPASSWORD-4%
account.4.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.4.outbound_host = %SBC_ADDRESS%
account.4.outbound_port = %SBC_PORT%
account.4.sip_listen_port =
account.4.transport = %TRANSPORT_TYPE%

#############################################################################
#########
##                            Failback
##
```


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```
##############################################################################
#########
account.4.reregister_enable =
account.4.naptr_build =
account.4.fallback.redundancy_type =
account.4.fallback.timeout =
account.4.sip_server.1.address = %BWHOST-4%
account.4.sip_server.1.port =
account.4.sip_server.1.expires =
account.4.sip_server.1.retry_counts =
account.4.sip_server.1.failback_mode =
account.4.sip_server.1.failback_timeout =
account.4.sip_server.1.register_on_enable =

account.4.sip_server.2.address =
account.4.sip_server.2.port =
account.4.sip_server.2.expires =
account.4.sip_server.2.retry_counts =
account.4.sip_server.2.failback_mode =
account.4.sip_server.2.failback_timeout =
account.4.sip_server.2.register_on_enable =

account.4.dns_cache_type =
account.4.dns_cache_a.1.name =
account.4.dns_cache_a.1.ip =
account.4.dns_cache_a.1.ttl =
account.4.dns_cache_srv.1.name =
account.4.dns_cache_srv.1.port =
account.4.dns_cache_srv.1.priority =
account.4.dns_cache_srv.1.target =
account.4.dns_cache_srv.1.weight =
account.4.dns_cache_srv.1.ttl =
account.4.dns_cache_naptr.1.name =
account.4.dns_cache_naptr.1.flags =
account.4.dns_cache_naptr.1.order =
account.4.dns_cache_naptr.1.preference =
account.4.dns_cache_naptr.1.replace =
account.4.dns_cache_naptr.1.service =
account.4.dns_cache_naptr.1.ttl =

account.4.dns_cache_type =
account.4.dns_cache_a.2.name =
account.4.dns_cache_a.2.ip =
account.4.dns_cache_a.2.ttl =
account.4.dns_cache_srv.2.name =
account.4.dns_cache_srv.2.port =
account.4.dns_cache_srv.2.priority =
account.4.dns_cache_srv.2.target =
account.4.dns_cache_srv.2.weight =
account.4.dns_cache_srv.2.ttl =
account.4.dns_cache_naptr.2.name =
account.4.dns_cache_naptr.2.flags =
account.4.dns_cache_naptr.2.order =
account.4.dns_cache_naptr.2.preference =
account.4.dns_cache_naptr.2.replace =
account.4.dns_cache_naptr.2.service =
account.4.dns_cache_naptr.2.ttl =

account.4.static_cache_pri =

##############################################################################
#########
##                            Register Advanced
##
##############################################################################
#########
account.4.sip_server_type = 2
account.4.unregister_on_reboot =
account.4.sip_trust_ctrl =
account.4.proxy_require =
```


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```
account.4.srv_ttl_timer_enable =
account.4.register_mac =
account.4.register_line =
account.4.reg_fail_retry_interval =

##############################################################################
##                      NAT Settings                                        ##
##############################################################################
account.4.nat.nat_traversal =
account.4.nat.stun_server =
account.4.nat.stun_port =
account.4.nat.udp_update_enable =
account.4.nat.udp_update_time =
account.4.nat.rport =

###############################################################################
#########
##                              Account4 Advance Settings
##
###############################################################################
#########
account.4.advanced.timer_t1 =
account.4.advanced.timer_t2 =
account.4.advanced.timer_t4 =

voice_mail.number.4 = %BWVOICE-PORTAL-NUMBER-4%

###############################################################################
#########
##                              Subscribe
##
###############################################################################
#########
account.4.subscribe_mwi =
account.4.subscribe_mwi_expires =
account.4.subscribe_mwi_to_vm =
account.4.subscribe_acd_expires=

###############################################################################
#########
##                              BLF List
##
###############################################################################
#########

account.4.blf.blf_list_uri = %BWBLF-URI-4%
account.4.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-4%
account.4.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-
4%

account.4.blf.subscribe_period =
account.4.blf.subscribe_event =
account.4.out_dialog_blf_enable =

###############################################################################
#########
##                              BLA/SCA
##
###############################################################################
#########
account.4.shared_line = %BWSHAREDLINE-BINARY-4%
account.4.bla_number =
account.4.bla_subscribe_period =

###############################################################################
#########
##                              Audio Codec
##
###############################################################################
#########
```


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```
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P support codec1~codec11
###T41P/T42G/T46G support codec1~codec12

account.4.codec.1.enable =
account.4.codec.1.payload_type =
account.4.codec.1.priority =
account.4.codec.1.rtpmap =

account.4.codec.2.enable =
account.4.codec.2.payload_type =
account.4.codec.2.priority =
account.4.codec.2.rtpmap =

account.4.codec.3.enable =
account.4.codec.3.payload_type =
account.4.codec.3.priority =
account.4.codec.3.rtpmap =

account.4.codec.4.enable =
account.4.codec.4.payload_type =
account.4.codec.4.priority =
account.4.codec.4.rtpmap =

account.4.codec.5.enable =
account.4.codec.5.payload_type =
account.4.codec.5.priority =
account.4.codec.5.rtpmap =

account.4.codec.6.enable =
account.4.codec.6.payload_type =
account.4.codec.6.priority =
account.4.codec.6.rtpmap =

account.4.codec.7.enable =
account.4.codec.7.payload_type =
account.4.codec.7.priority =
account.4.codec.7.rtpmap =

account.4.codec.8.enable =
account.4.codec.8.payload_type =
account.4.codec.8.priority =
account.4.codec.8.rtpmap =

account.4.codec.9.enable =
account.4.codec.9.payload_type =
account.4.codec.9.priority =
account.4.codec.9.rtpmap =

account.4.codec.10.enable =
account.4.codec.10.payload_type =
account.4.codec.10.priority =
account.4.codec.10.rtpmap =

account.4.codec.11.enable =
account.4.codec.11.payload_type =
account.4.codec.11.priority =
account.4.codec.11.rtpmap =


##############################################################################
#########
##                            Audio Advanced
##
##############################################################################
#########
account.4.srtp_encryption =
account.4.ptime =

##############################################################################
```


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```
#########
##                              Anonymous Call
##
#########################################################################################
#########
account.4.send_anonymous_code =
account.4.anonymous_call =
account.4.anonymous_call_oncode =
account.4.anonymous_call_offcode =
account.4.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.4.anonymous_reject_oncode =
account.4.anonymous_reject_offcode =

#########################################################################################
#########
##                              Pickup Code
##
#########################################################################################
#########
account.4.dialoginfo_callpickup =
account.4.group_pickup_code = %BWFAC-CALL-PICKUP-4%
account.4.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-4%

#########################################################################################
#########
##                              DTMF
##
#########################################################################################
#########
account.4.dtmf.type =
account.4.dtmf.info_type =
account.4.dtmf.dtmf_payload =

#########################################################################################
#########
##                              Alert info
##
#########################################################################################
#########
account.4.alert_info_url_enable =
account.4.ringtone.ring_type =

#########################################################################################
#########
##                              Conference
##
#########################################################################################
#########
account.4.conf_type =
account.4.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-4%

#########################################################################################
#########
##                              CID Source
##
#########################################################################################
#########
account.4.cid_source =
account.4.cid_source_privacy =
account.4.cid_source_ppi =
account.4.cp_source =

#########################################################################################
#########
##                              Session Timer
##
#########################################################################################
#########
account.4.session_timer.enable =
account.4.session_timer.expires =
```


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```
account.4.session_timer.refresher =

##############################################################################
#########
##                            Music on Hold
##
##############################################################################
#########
account.4.music_on_hold_type =
account.4.music_server_uri =

##############################################################################
#########
##                            Advanced
##
##############################################################################
#########
account.4.auto_answer = %AUTO_ANSWER_BINARY%
account.4.missed_calllog =
account.4.100rel_enable =
account.4.enable_user_equal_phone =
account.4.compact_header_enable =

##############################################################################
#########
##                                DND(Except T19 Model)
##
##############################################################################
#########
account.4.dnd.enable =
account.4.dnd.on_code =
account.4.dnd.off_code =

##############################################################################
#########
##                               Call Forward(Except T19 Model)
##
##############################################################################
#########
account.4.always_fwd.enable =
account.4.always_fwd.target =
account.4.always_fwd.off_code =
account.4.always_fwd.on_code =
account.4.busy_fwd.enable =
account.4.busy_fwd.target =
account.4.busy_fwd.off_code =
account.4.busy_fwd.on_code =
account.4.timeout_fwd.enable =
account.4.timeout_fwd.target =
account.4.timeout_fwd.timeout =
account.4.timeout_fwd.off_code =
account.4.timeout_fwd.on_code =

##############################################################################
#########
##                               Broadsoft Hoteling
##
##############################################################################
#########
account.4.hoteling.enable =
account.4.hoteling.user_id =
account.4.hoteling.password =
account.4.hoteling.auto_login_enable =

##############################################################################
#########
##                               Broadsoft ACD
##
##############################################################################
#########
```


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```
account.4.acd.enable =
account.4.acd.unavailable_reason_enable =
account.4.acd.available =
account.4.acd.initial_state =

##############################################################################
#########
##                                Broadsoft ACD Call Center
##
##############################################################################
#########
account.4.reason_code.1 =
account.4.reason_code_name.1 =
account.4.bw_disp_code.1 =
account.4.bw_disp_code_name.1 =
account.4.supervisor_info_code.1 =
account.4.supervisor_info_code_name.1 =

##############################################################################
#########
##                                Broadsoft Call Center
##
##############################################################################
#########
account.4.call_center.call_info_enable =
account.4.call_center.show_call_info_time =
account.4.call_center.disp_code_enable =
account.4.call_center.trace_enable =
account.4.call_center.emergency_enable =
account.4.call_center.queue_status_enable =
account.4.call_center.queue_status_light_enable =

##############################################################################
#########
##                           Account5 Basic Settings
##
##############################################################################
#########
account.5.enable = %BWLINE-BINARY-5%
account.5.label = %BWEXTENSION-5%
account.5.display_name = %BWCLID-5%
account.5.auth_name = %BWAUTHUSER-5%
account.5.user_name = %BWLINEPORT-5%
account.5.password = %BWAUTHPASSWORD-5%
account.5.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.5.outbound_host = %SBC_ADDRESS%
account.5.outbound_port = %SBC_PORT%
account.5.sip_listen_port =
account.5.transport = %TRANSPORT_TYPE%

##############################################################################
#########
##                           Failback
##
##############################################################################
#########
account.5.reregister_enable =
account.5.naptr_build =
account.5.fallback.redundancy_type =
account.5.fallback.timeout =
account.5.sip_server.1.address = %BWHOST-5%
account.5.sip_server.1.port =
account.5.sip_server.1.expires =
account.5.sip_server.1.retry_counts =
account.5.sip_server.1.failback_mode =
account.5.sip_server.1.failback_timeout =
account.5.sip_server.1.register_on_enable =

account.5.sip_server.2.address =
account.5.sip_server.2.port =
```


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```
account.5.sip_server.2.expires =
account.5.sip_server.2.retry_counts =
account.5.sip_server.2.failback_mode =
account.5.sip_server.2.failback_timeout =
account.5.sip_server.2.register_on_enable =

account.5.dns_cache_type =
account.5.dns_cache_a.1.name =
account.5.dns_cache_a.1.ip =
account.5.dns_cache_a.1.ttl =
account.5.dns_cache_srv.1.name =
account.5.dns_cache_srv.1.port =
account.5.dns_cache_srv.1.priority =
account.5.dns_cache_srv.1.target =
account.5.dns_cache_srv.1.weight =
account.5.dns_cache_srv.1.ttl =
account.5.dns_cache_naptr.1.name =
account.5.dns_cache_naptr.1.flags =
account.5.dns_cache_naptr.1.order =
account.5.dns_cache_naptr.1.preference =
account.5.dns_cache_naptr.1.replace =
account.5.dns_cache_naptr.1.service =
account.5.dns_cache_naptr.1.ttl =

account.5.dns_cache_type =
account.5.dns_cache_a.2.name =
account.5.dns_cache_a.2.ip =
account.5.dns_cache_a.2.ttl =
account.5.dns_cache_srv.2.name =
account.5.dns_cache_srv.2.port =
account.5.dns_cache_srv.2.priority =
account.5.dns_cache_srv.2.target =
account.5.dns_cache_srv.2.weight =
account.5.dns_cache_srv.2.ttl =
account.5.dns_cache_naptr.2.name =
account.5.dns_cache_naptr.2.flags =
account.5.dns_cache_naptr.2.order =
account.5.dns_cache_naptr.2.preference =
account.5.dns_cache_naptr.2.replace =
account.5.dns_cache_naptr.2.service =
account.5.dns_cache_naptr.2.ttl =

account.5.static_cache_pri =

##############################################################################
#########
##                          Register Advanced
##
##############################################################################
#########
account.5.sip_server_type = 2
account.5.unregister_on_reboot =
account.5.sip_trust_ctrl =
account.5.proxy_require =
account.5.srv_ttl_timer_enable =
account.5.register_mac =
account.5.register_line =
account.5.reg_fail_retry_interval =

##############################################################################
##                      NAT Settings                                        ##
##############################################################################
account.5.nat.nat_traversal =
account.5.nat.stun_server =
account.5.nat.stun_port =
account.5.nat.udp_update_enable =
account.5.nat.udp_update_time =
account.5.nat.rport =

##############################################################################
```


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```
#########
##                            Account5 Advance Settings
##
#################################################################################
#########
account.5.advanced.timer_t1 =
account.5.advanced.timer_t2 =
account.5.advanced.timer_t4 =

voice_mail.number.5 = %BWVOICE-PORTAL-NUMBER-5%

#################################################################################
#########
##                            Subscribe
##
#################################################################################
#########
account.5.subscribe_mwi =
account.5.subscribe_mwi_expires =
account.5.subscribe_mwi_to_vm =
account.5.subscribe_acd_expires=

#################################################################################
#########
##                            BLF List
##
#################################################################################
#########

account.5.blf.blf_list_uri = %BWBLF-URI-5%
account.5.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-5%
account.5.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-
5%

account.5.blf.subscribe_period =
account.5.blf.subscribe_event =
account.5.out_dialog_blf_enable =

#################################################################################
#########
##                            BLA/SCA
##
#################################################################################
#########
account.5.shared_line = %BWSHAREDLINE-BINARY-5%
account.5.bla_number =
account.5.bla_subscribe_period =

#################################################################################
#########
##                            Audio Codec
##
#################################################################################
#########
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P support codec1~codec11
###T41P/T42G/T46G support codec1~codec12

account.5.codec.1.enable =
account.5.codec.1.payload_type =
account.5.codec.1.priority =
account.5.codec.1.rtpmap =

account.5.codec.2.enable =
account.5.codec.2.payload_type =
account.5.codec.2.priority =
account.5.codec.2.rtpmap =

account.5.codec.3.enable =
account.5.codec.3.payload_type =
```


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```
account.5.codec.3.priority =
account.5.codec.3.rtpmap =

account.5.codec.4.enable =
account.5.codec.4.payload_type =
account.5.codec.4.priority =
account.5.codec.4.rtpmap =

account.5.codec.5.enable =
account.5.codec.5.payload_type =
account.5.codec.5.priority =
account.5.codec.5.rtpmap =

account.5.codec.6.enable =
account.5.codec.6.payload_type =
account.5.codec.6.priority =
account.5.codec.6.rtpmap =

account.5.codec.7.enable =
account.5.codec.7.payload_type =
account.5.codec.7.priority =
account.5.codec.7.rtpmap =

account.5.codec.8.enable =
account.5.codec.8.payload_type =
account.5.codec.8.priority =
account.5.codec.8.rtpmap =

account.5.codec.9.enable =
account.5.codec.9.payload_type =
account.5.codec.9.priority =
account.5.codec.9.rtpmap =

account.5.codec.10.enable =
account.5.codec.10.payload_type =
account.5.codec.10.priority =
account.5.codec.10.rtpmap =

account.5.codec.11.enable =
account.5.codec.11.payload_type =
account.5.codec.11.priority =
account.5.codec.11.rtpmap =


##############################################################################
#########
##                            Audio Advanced
##
##############################################################################
#########
account.5.srtp_encryption =
account.5.ptime =

##############################################################################
#########
##                            Anonymous Call
##
##############################################################################
#########
account.5.send_anonymous_code =
account.5.anonymous_call =
account.5.anonymous_call_oncode =
account.5.anonymous_call_offcode =
account.5.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.5.anonymous_reject_oncode =
account.5.anonymous_reject_offcode =

##############################################################################
#########
##                            Pickup Code
```


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```
##
###############################################################################
#########
account.5.dialoginfo_callpickup =
account.5.group_pickup_code = %BWFAC-CALL-PICKUP-5%
account.5.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-5%

###############################################################################
#########
##                              DTMF
##
###############################################################################
#########
account.5.dtmf.type =
account.5.dtmf.info_type =
account.5.dtmf.dtmf_payload =

###############################################################################
#########
##                              Alert info
##
###############################################################################
#########
account.5.alert_info_url_enable =
account.5.ringtone.ring_type =

###############################################################################
#########
##                              Conference
##
###############################################################################
#########
account.5.conf_type =
account.5.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-5%

###############################################################################
#########
##                              CID Source
##
###############################################################################
#########
account.5.cid_source =
account.5.cid_source_privacy =
account.5.cid_source_ppi =
account.5.cp_source =

###############################################################################
#########
##                              Session Timer
##
###############################################################################
#########
account.5.session_timer.enable =
account.5.session_timer.expires =
account.5.session_timer.refresher =

###############################################################################
#########
##                              Music on Hold
##
###############################################################################
#########
account.5.music_on_hold_type =
account.5.music_server_uri =

###############################################################################
#########
##                              Advanced
##
###############################################################################
```


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```
#########
account.5.auto_answer = %AUTO_ANSWER_BINARY%
account.5.missed_calllog =
account.5.100rel_enable =
account.5.enable_user_equal_phone =
account.5.compact_header_enable =

##############################################################################
#########
##                                  DND
##
##############################################################################
#########
account.5.dnd.enable =
account.5.dnd.on_code =
account.5.dnd.off_code =

##############################################################################
#########
##                                Call Forward
##
##############################################################################
#########
account.5.always_fwd.enable =
account.5.always_fwd.target =
account.5.always_fwd.off_code =
account.5.always_fwd.on_code =
account.5.busy_fwd.enable =
account.5.busy_fwd.target =
account.5.busy_fwd.off_code =
account.5.busy_fwd.on_code =
account.5.timeout_fwd.enable =
account.5.timeout_fwd.target =
account.5.timeout_fwd.timeout =
account.5.timeout_fwd.off_code =
account.5.timeout_fwd.on_code =

##############################################################################
#########
##                                Broadsoft Hoteling
##
##############################################################################
#########
account.5.hoteling.enable =
account.5.hoteling.user_id =
account.5.hoteling.password =
account.5.hoteling.auto_login_enable =

##############################################################################
#########
##                                Broadsoft ACD
##
##############################################################################
#########
account.5.acd.enable =
account.5.acd.unavailable_reason_enable =
account.5.acd.available =
account.5.acd.initial_state =

##############################################################################
#########
##                                Broadsoft ACD Call Center
##
##############################################################################
#########
account.5.reason_code.1 =
account.5.reason_code_name.1 =
account.5.bw_disp_code.1 =
account.5.bw_disp_code_name.1 =
account.5.supervisor_info_code.1 =
```


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```
account.5.supervisor_info_code_name.1 =

##############################################################################
#########
##                                  Broadsoft Call Center
##
##############################################################################
#########
account.5.call_center.call_info_enable =
account.5.call_center.show_call_info_time =
account.5.call_center.disp_code_enable =
account.5.call_center.trace_enable =
account.5.call_center.emergency_enable =
account.5.call_center.queue_status_enable =
account.5.call_center.queue_status_light_enable =

##############################################################################
#########
##                             Account6 Basic Settings
##
##############################################################################
#########
account.6.enable = %BWLINE-BINARY-6%
account.6.label = %BWEXTENSION-6%
account.6.display_name = %BWCLID-6%
account.6.auth_name = %BWAUTHUSER-6%
account.6.user_name = %BWLINEPORT-6%
account.6.password = %BWAUTHPASSWORD-6%
account.6.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.6.outbound_host = %SBC_ADDRESS%
account.6.outbound_port = %SBC_PORT%
account.6.sip_listen_port =
account.6.transport = %TRANSPORT_TYPE%

##############################################################################
#########
##                            Failback
##
##############################################################################
#########
account.6.reregister_enable =
account.6.naptr_build =
account.6.fallback.redundancy_type =
account.6.fallback.timeout =
account.6.sip_server.1.address = %BWHOST-6%
account.6.sip_server.1.port =
account.6.sip_server.1.expires =
account.6.sip_server.1.retry_counts =
account.6.sip_server.1.failback_mode =
account.6.sip_server.1.failback_timeout =
account.6.sip_server.1.register_on_enable =

account.6.sip_server.2.address =
account.6.sip_server.2.port =
account.6.sip_server.2.expires =
account.6.sip_server.2.retry_counts =
account.6.sip_server.2.failback_mode =
account.6.sip_server.2.failback_timeout =
account.6.sip_server.2.register_on_enable =

account.6.dns_cache_type =
account.6.dns_cache_a.1.name =
account.6.dns_cache_a.1.ip =
account.6.dns_cache_a.1.ttl =
account.6.dns_cache_srv.1.name =
account.6.dns_cache_srv.1.port =
account.6.dns_cache_srv.1.priority =
account.6.dns_cache_srv.1.target =
account.6.dns_cache_srv.1.weight =
account.6.dns_cache_srv.1.ttl =
```


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```
account.6.dns_cache_naptr.1.name =
account.6.dns_cache_naptr.1.flags =
account.6.dns_cache_naptr.1.order =
account.6.dns_cache_naptr.1.preference =
account.6.dns_cache_naptr.1.replace =
account.6.dns_cache_naptr.1.service =
account.6.dns_cache_naptr.1.ttl =

account.6.dns_cache_type =
account.6.dns_cache_a.2.name =
account.6.dns_cache_a.2.ip =
account.6.dns_cache_a.2.ttl =
account.6.dns_cache_srv.2.name =
account.6.dns_cache_srv.2.port =
account.6.dns_cache_srv.2.priority =
account.6.dns_cache_srv.2.target =
account.6.dns_cache_srv.2.weight =
account.6.dns_cache_srv.2.ttl =
account.6.dns_cache_naptr.2.name =
account.6.dns_cache_naptr.2.flags =
account.6.dns_cache_naptr.2.order =
account.6.dns_cache_naptr.2.preference =
account.6.dns_cache_naptr.2.replace =
account.6.dns_cache_naptr.2.service =
account.6.dns_cache_naptr.2.ttl =

account.6.static_cache_pri =

##############################################################################
#########
##                          Register Advanced
##
##############################################################################
#########
account.6.sip_server_type =
account.6.unregister_on_reboot =
account.6.sip_trust_ctrl =
account.6.proxy_require =
account.6.srv_ttl_timer_enable =
account.6.register_mac =
account.6.register_line =
account.6.reg_fail_retry_interval =

##############################################################################
##                      NAT Settings                                        ##
##############################################################################
account.6.nat.nat_traversal =
account.6.nat.stun_server =
account.6.nat.stun_port =
account.6.nat.udp_update_enable =
account.6.nat.udp_update_time =
account.6.nat.rport =

##############################################################################
#########
##                           Account6 Advance Settings
##
##############################################################################
#########
account.6.advanced.timer_t1 =
account.6.advanced.timer_t2 =
account.6.advanced.timer_t4 =

voice_mail.number.6 = %BWVOICE-PORTAL-NUMBER-6%

##############################################################################
#########
##                           Subscribe
##
##############################################################################
```


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```
#########
account.6.subscribe_mwi =
account.6.subscribe_mwi_expires =
account.6.subscribe_mwi_to_vm =
account.6.subscribe_acd_expires=

##############################################################################
#########
##                            BLF List
##
##############################################################################
#########

account.6.blf.blf_list_uri = %BWBLF-URI-6%
account.6.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-6%
account.6.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-
6%

account.6.blf.subscribe_period =
account.6.blf.subscribe_event =
account.6.out_dialog_blf_enable =

##############################################################################
#########
##                            BLA/SCA
##
##############################################################################
#########
account.6.shared_line = %BWSHAREDLINE-BINARY-6%
account.6.bla_number =
account.6.bla_subscribe_period =

##############################################################################
#########
##                            Audio Codec
##
##############################################################################
#########
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P support codec1~codec11
###T41P/T42G/T46G support codec1~codec12

account.6.codec.1.enable =
account.6.codec.1.payload_type =
account.6.codec.1.priority =
account.6.codec.1.rtpmap =

account.6.codec.2.enable =
account.6.codec.2.payload_type =
account.6.codec.2.priority =
account.6.codec.2.rtpmap =

account.6.codec.3.enable =
account.6.codec.3.payload_type =
account.6.codec.3.priority =
account.6.codec.3.rtpmap =

account.6.codec.4.enable =
account.6.codec.4.payload_type =
account.6.codec.4.priority =
account.6.codec.4.rtpmap =

account.6.codec.5.enable =
account.6.codec.5.payload_type =
account.6.codec.5.priority =
account.6.codec.5.rtpmap =

account.6.codec.6.enable =
account.6.codec.6.payload_type =
account.6.codec.6.priority =
```


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```
account.6.codec.6.rtpmap =

account.6.codec.7.enable =
account.6.codec.7.payload_type =
account.6.codec.7.priority =
account.6.codec.7.rtpmap =

account.6.codec.8.enable =
account.6.codec.8.payload_type =
account.6.codec.8.priority =
account.6.codec.8.rtpmap =

account.6.codec.9.enable =
account.6.codec.9.payload_type =
account.6.codec.9.priority =
account.6.codec.9.rtpmap =

account.6.codec.10.enable =
account.6.codec.10.payload_type =
account.6.codec.10.priority =
account.6.codec.10.rtpmap =

account.6.codec.11.enable =
account.6.codec.11.payload_type =
account.6.codec.11.priority =
account.6.codec.11.rtpmap =



##############################################################################
#########
##                            Audio Advanced
##
##############################################################################
#########
account.6.srtp_encryption =
account.6.ptime =

##############################################################################
#########
##                            Anonymous Call
##
##############################################################################
#########
account.6.send_anonymous_code =
account.6.anonymous_call =
account.6.anonymous_call_oncode =
account.6.anonymous_call_offcode =
account.6.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.6.anonymous_reject_oncode =
account.6.anonymous_reject_offcode =

##############################################################################
#########
##                            Pickup Code
##
##############################################################################
#########
account.6.dialoginfo_callpickup =
account.6.group_pickup_code = %BWFAC-CALL-PICKUP-6%
account.6.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-6%

##############################################################################
#########
##                            DTMF
##
##############################################################################
#########
account.6.dtmf.type =
account.6.dtmf.info_type =
```


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```
###Only T46G Model supports this parameter
account.6.dtmf.dtmf_payload =

##############################################################################
#########
##                            Alert info
##
##############################################################################
#########
account.6.alert_info_url_enable =
account.6.ringtone.ring_type =

##############################################################################
#########
##                            Conference
##
##############################################################################
#########
account.6.conf_type =
account.6.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-6%

##############################################################################
#########
##                            CID Source
##
##############################################################################
#########
account.6.cid_source =
account.6.cid_source_privacy =
account.6.cid_source_ppi =
account.6.cp_source =

##############################################################################
#########
##                            Session Timer
##
##############################################################################
#########
account.6.session_timer.enable =
account.6.session_timer.expires =
account.6.session_timer.refresher =

##############################################################################
#########
##                            Music on Hold
##
##############################################################################
#########
account.6.music_on_hold_type =
account.6.music_server_uri =

##############################################################################
#########
##                            Advanced
##
##############################################################################
#########
account.6.auto_answer = %AUTO_ANSWER_BINARY%
account.6.missed_calllog =
account.6.100rel_enable =
account.6.enable_user_equal_phone =
account.6.compact_header_enable =

##############################################################################
#########
##                                 DND
##
##############################################################################
#########
account.6.dnd.enable =
```


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```
account.6.dnd.on_code =
account.6.dnd.off_code =

##############################################################################
#########
##                                Call Forward
##
##############################################################################
#########
account.6.always_fwd.enable =
account.6.always_fwd.target =
account.6.always_fwd.off_code =
account.6.always_fwd.on_code =
account.6.busy_fwd.enable =
account.6.busy_fwd.target =
account.6.busy_fwd.off_code =
account.6.busy_fwd.on_code =
account.6.timeout_fwd.enable =
account.6.timeout_fwd.target =
account.6.timeout_fwd.timeout =
account.6.timeout_fwd.off_code =
account.6.timeout_fwd.on_code =

##############################################################################
#########
##                                Broadsoft Hoteling
##
##############################################################################
#########
account.6.hoteling.enable =
account.6.hoteling.user_id =
account.6.hoteling.password =
account.6.hoteling.auto_login_enable =

##############################################################################
#########
##                                Broadsoft ACD
##
##############################################################################
#########
account.6.acd.enable =
account.6.acd.unavailable_reason_enable =
account.6.acd.available =
account.6.acd.initial_state =

##############################################################################
#########
##                                Broadsoft ACD Call Center
##
##############################################################################
#########
account.6.reason_code.1 =
account.6.reason_code_name.1 =
account.6.bw_disp_code.1 =
account.6.bw_disp_code_name.1 =
account.6.supervisor_info_code.1 =
account.6.supervisor_info_code_name.1 =

##############################################################################
#########
##                                Broadsoft Call Center
##
##############################################################################
#########
account.6.call_center.call_info_enable =
account.6.call_center.show_call_info_time =
account.6.call_center.disp_code_enable =
account.6.call_center.trace_enable =
account.6.call_center.emergency_enable =
account.6.call_center.queue_status_enable =
```


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```
account.6.call_center.queue_status_light_enable =

##############################################################################
#########
##                                  Broadsoft Setting
##
##############################################################################
#########
bw.directory_enable = %FEATURY_BW_DIR%

###It enables or disables feature key synchronization.
###0-Disabled,1-Enabled.
###The default value is 0.
bw.feature_key_sync = %FEATURE_SYNC%

#Enable or disable the phone to access the BSFT call log/phonebook directly
when pressing the History/Directory soft keys;
#0-Disabled , 1-Enabled(default);
#Require reboot;
bw.calllog_and_dir = %FEATURE_BW_CALL_LOG%

##############################################################################
#########
##         Broadsoft XSI
##
##############################################################################
#########
##It configures the user name for XSI authentication for account
X.Example:account.1.xsi.user = 3502@as.iop1.broadworks.net.
##The default value is blank.
account.1.xsi.user =  %BWLOGIN-ID-1%
##It configures the password for XSI authentication for account
X.Example:account.1.xsi.password = 123456.
##The default value is blank.
account.1.xsi.password = %XSIPASSWORD-1%
##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.1.xsi.host = xsp1.iop1.broadworks.net.
##The default value is blank.
account.1.xsi.host = %XSP_ADDRESS%
##It configures the server type of the Xtended Services Platform server for
account X.Example:account.1.xsi.server_type = http.
##The default value is http.
account.1.xsi.server_type =
##It configures the server port of the Xtended Services Platform server for
account X.Example:account.1.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.1.xsi.port =
##It configures the interval (in minutes) for the phone to update the data of
the BroadSoft directory from the BroadSoft server.
##The default value is 60.Integer from 2 to 43200
directory.update_time_interval =

##############################################################################
#########
##                                    Broadsoft Phonebook
##
##############################################################################
#########
###It enables or disables the phone to display the group directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.group_enable = 1
###It enables or disables the phone to display the personal directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.personal_enable = 1
###It enables or disables the phone to display the group common directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.group_common_enable = 1
```


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```
###It configures the display name on the LCD screen for the group common
directory.
###The default value is GroupCommon.
bw_phonebook.group_common_displayname = GroupCommon
###It enables or disables the phone to display the enterprise directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.enterprise_enable = 1
###It enables or disables the phone to display the enterprise common
directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.enterprise_common_enable = 1
###It configures the display name on the LCD screen for the enterprise common
directory.
###The default value is EnterpriseCommon.
bw_phonebook.enterprise_common_displayname = EnterpriseCommon
###It enables or disables BroadSoft call log feature.
###0-Disabled,1-Enabled.
###The default value is 0.
bw_phonebook.call_log_enable = 1
###It enables or disables custom directory feature.
###0-Disabled,1-Enabled.
###The default value is 0.
bw_phonebook.custom =
###It configures the display name on the LCD screen for the group directory.
###The default value is Group.
bw_phonebook.group_displayname = %BWGROUPID-1%
###It configures the display name on the LCD screen for the enterprise
directory.
###The default value is Enterprise.
bw_phonebook.enterprise_displayname = %BWENTERPRISEID-1%%BWSERVICEPROVIDERID-
1%
###It configures the display name on the LCD screen for the personal
directory.
###The default value is Personal.
bw_phonebook.personal_displayname = Personal

##############################################################################
#########
##                                  Features Pickup
##
##############################################################################
#########
##It enables or disables the phone to display the GPickup soft key when the
phone is in the pre-dialing screen.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.group_pickup_enable =
##It configures the group call pickup code.
##The default value is blank.
features.pickup.group_pickup_code = %BWFAC-CALL-PICKUP-1%
##It enables or disables the phone to display the DPickup soft key when the
phone is in the pre-dialing screen.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.direct_pickup_enable =
##It configures the directed call pickup code.
##The default value is blank.
features.pickup.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-1%
##It enables or disables the phone to display a visual alert when the
monitored user receives an incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.blf_visual_enable =
##It enables or disables the phone to play an audio alert when the monitored
user receives an incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.blf_audio_enable =
```


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```
##############################################################################
#########
##                                    Call Park
##
##############################################################################
#########
###It enables or disables the phone to display the Park soft key during a
call.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.enable = %FEATURE_BW_CALL_PARK%
###It enables or disables the phone to display the GPark soft key during a
call.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.group_enable = %FEATURE_BW_CALL_PARK%
###It enables or disables the phone to play a warning tone when a call is
parked against its line.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.park_ring = %FEATURE_BW_CALL_PARK%
###It enables or disables the phone to display a parked indicator when a call
is parked against its line.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.park_visual_notify_enable = %FEATURE_BW_CALL_PARK%

##############################################################################
#########
##                                    Time
##
##############################################################################
#########
##It configures the time zone.For more available time zones, refer to Time
Zones on page 215.
##The default value is +8.
local_time.time_zone = %BWTIMEZONE-1%
##It configures the time zone name.For more available time zone names, refer
to Time Zones on page 215.
##The default time zone name is China(Beijing).
local_time.time_zone_name = %TIMEZONENAME%
local_time.ntp_server1 = %SNTP_SERVER_1%
local_time.ntp_server2 = %SNTP_SERVER_2%
##It configures the update interval (in seconds) when using the NTP server.
##The default value is 1000.Integer from 15 to 86400
local_time.interval =
##It enables or disables daylight saving time (DST) feature.
##0-Disabled,1-Enabled,2-Automatic.
##The default value is 2.
local_time.summer_time =
##It configures the way DST works when DST feature is enabled.
##0-DST By Date ,1-DST By Week.
##The default value is 0.
local_time.dst_time_type =
##It configures the start time of the DST.
##Value formats are:Month/Day/Hour (for By Date),Month/ Day of Week/ Day of
Week Last in Month/ Hour of Day (for By Week)
##The default value is 1/1/0.
local_time.start_time =
##It configures the end time of the DST.
##Value formats are:Month/Day/Hour (for By Date),Month/ Day of Week/ Day of
Week Last in Month/ Hour of Day (for By Week)
##The default value is 12/31/23.
local_time.end_time =
##It configures the offset time (in minutes).
##The default value is blank.Integer from -300 to 300
local_time.offset_time =
##It configures the time format.0-12 Hour,1-24 Hour.
##The default value is 1.
```


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```
local_time.time_format =
local_time.date_format =
##It enables or disables the phone to update time with the offset time
obtained from the DHCP server.
##It is only available to offset from GMT 0.0-Disabled,1-Enabled.
##The default value is 0.
local_time.dhcp_time =
##It configures the phone to obtain time from NTP server or manual settings.0-
Manual,1-NTP
##The default value is 1.
local_time.manual_time_enable =
##It enables or disables the phone to use manually configured NTP server
preferentially.
##0-Disabled (use the NTP server obtained by DHCP preferentially),1-Enabled.
##The default value is 0.
local_time.manual_ntp_srv_prior =
auto_dst.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%Autodst.xml

#############################################################################
#########
##                                  Tones
##
#############################################################################
#########
voice.tone.country = %COUNTRY%
voice.tone.dial =
voice.tone.ring =
voice.tone.busy =
voice.tone.congestion =
voice.tone.callwaiting =
voice.tone.dialrecall =
voice.tone.info =
voice.tone.stutter =
voice.tone.message =
voice.tone.autoanswer =

#############################################################################
#########
##                                  Language Settings
##
#############################################################################
#########
##It configures the language of the web user interface.
##Chinese_S is only applicable to SIP-T19P, SIP-T21P and SIP-T46G IP phones.
##Chinese_T is only applicable to SIP-T46G IP phones.
##French, Portuguese and Spanish are not applicable to SIP-T19P and SIP-T21P
IP phones.
lang.wui =
##It configures the language of the phone user interface.
##Chinese_S and Chinese_T are only applicable to SIP-T19P, SIP-T21P and SIP-
T46G IP phones.
##The default value is English.
lang.gui =
gui_lang.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCES
SURI%%BWLANGUAGE-1%
gui_lang.delete =

#############################################################################
#########
##                                  Autop
##
#############################################################################
#########
auto_provision.server.username = %BWDEVICEUSERNAME%
auto_provision.server.password = %DEVICE_ACCESS_PWD%

#############################################################################
```


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```
#########
##                                    NETWORK
##
###############################################################################
#########
##It configures the IP address mode.0-IPv4,1-IPv6,2-IPv4&IPv6
##The default value is 0.It takes effect after a reboot.
network.ip_address_mode =

network.ipv6_prefix =
network.ipv6_internet_port.type =
network.ipv6_internet_port.ip =
network.ipv6_internet_port.gateway =
network.ipv6_primary_dns =
network.ipv6_secondary_dns =

network.internet_port.type =
network.internet_port.ip =
network.internet_port.mask =
network.internet_port.gateway =
network.primary_dns= %DNS_SERVER_1%
network.secondary_dns = %DNS_SERVER_2%
```


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Appendix B: %TIMEZONENAME% Values

Time Zone	Time Zone Name
−11:00	Samoa
−10:00	United States-Hawaii-Aleutian
−10:00	United States-Alaska-Aleutian
−09:00	United States-Alaska Time
−08:00	Canada (Vancouver, Whitehorse)
−08:00	Mexico (Tijuana, Mexicali)
−08:00	United States-Pacific Time
−07:00	Canada (Edmonton, Calgary)
−07:00	Mexico (Mazatlan, Chihuahua)
−07:00	United States-Mountain Time
−07:00	United States-MST no DST
−06:00	Canada-Manitoba(Winnipeg)
−06:00	Chile (Easter Islands)
−06:00	Mexico (Mexico City, Acapulco)
−06:00	United States-Central Time
−05:00	Bahamas (Nassau)
−05:00	Canada (Montreal, Ottawa, Quebec)
−05:00	Cuba (Havana)
−05:00	United States-Eastern Time
−04:30	Venezuela (Caracas)
−04:00	Canada (Halifax, Saint John)
−04:00	Chile (Santiago)
−04:00	Paraguay (Asuncion)
−04:00	United Kingdom-Bermuda (Bermuda)
−04:00	United Kingdom (Falkland Islands)
−04:00	Trinidad&Tobago
−03:30	Canada-New Foundland (St.Johns)
−03:00	Denmark-Greenland (Nuuk)
−03:00	Argentina (Buenos Aires)
−03:00	Brazil (no DST)
−03:00	Brazil (DST)
−02:00	Brazil (no DST)
−01:00	Portugal (Azores)

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Time Zone	Time Zone Name
0	GMT
0	Greenland
0	Denmark-Faroe Islands (Torshavn)
0	Ireland (Dublin)
0	Portugal (Lisboa, Porto, Funchal)
0	Spain-Canary Islands (Las Palmas) Administrator's Guide for SIP-T4X IP Phones
0	United Kingdom (London)
0	Morocco
+01:00	Albania (Tirane)
+01:00	Austria (Vienna)
+01:00	Belgium (Brussels)
+01:00	Caicos
+01:00	Chad
+01:00	Croatia (Zagreb)
+01:00	Czech Republic (Prague)
+01:00	Denmark (Kopenhagen)
+01:00	France (Paris)
+01:00	Germany (Berlin)
+01:00	Hungary (Budapest)
+01:00	Italy (Rome)
+01:00	Luxembourg (Luxembourg)
+01:00	Macedonia (Skopje)
+01:00	Netherlands (Amsterdam)
+01:00	Namibia (Windhoek)
+02:00	Estonia (Tallinn)
+02:00	Finland (Helsinki)
+02:00	Gaza Strip (Gaza)
+02:00	Greece (Athens)
+02:00	Israel (Tel Aviv)
+02:00	Jordan (Amman)
+02:00	Latvia (Riga)
+02:00	Lebanon (Beirut)
+02:00	Moldova (Kishinev)
+02:00	Russia (Kaliningrad)
+02:00	Romania (Bucharest)

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Time Zone	Time Zone Name
+02:00	Syria (Damascus)
+02:00	Turkey (Ankara)
+02:00	Ukraine (Kyiv, Odessa)
+03:00	East Africa Time
+03:00	Iraq (Baghdad)
+03:00	Russia (Moscow)
+03:30	Iran (Teheran)
+04:00	Armenia (Yerevan)
+04:00	Azerbaijan (Baku)
+04:00	Georgia (Tbilisi)
+04:00	Kazakhstan (Aktau)
+04:00	Russia (Samara)
+04:30	AfghanistanAppendix
+05:00	Kazakhstan (Aqtobe)
+05:00	Kyrgyzstan (Bishkek)
+05:00	Pakistan (Islamabad)
+05:00	Russia (Chelyabinsk)
+05:30	India (Calcutta)
+06:00	Kazakhstan (Astana, Almaty)
+06:00	Russia (Novosibirsk, Omsk)
+07:00	Russia (Krasnoyarsk)
+07:00	Thailand (Bangkok)
+08:00	China (Beijing)
+08:00	Singapore (Singapore)
+08:00	Australia (Perth)
+09:00	Korea (Seoul)
+09:00	Japan (Tokyo)
+09:30	Australia (Adelaide)
+09:30	Australia (Darwin)
+10:00	Australia (Sydney, Melbourne, Canberra)
+10:00	Australia (Brisbane)
+10:00	Australia (Hobart)
+10:00	Russia (Vladivostok)
+10:30	Australia (Lord Howe Islands)
+11:00	New Caledonia (Noumea)

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Time Zone	Time Zone Name
+12:00	New Zealand (Wellington, Auckland)
+12:45	New Zealand (Chatham Islands)
+13:00	Tonga (Nukualofa)

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